

Program Spaces

6311

**Program Type 1 - Table of Contents**

Spatial Relationship Diagram

Example

**CT-P1-1 Lab****Accounting - 7****Administrative and Professional Support - 8****Automation & Robotics - 9****Aviation Occupations - 10****Business Management – 11****Electronics - 9****Financial Services - 12****Information Support & Services - 16****Interactive Media - 16****Legal Management and Support - 8****Medical Management and Support - 13****Network Systems - 16****Programming and Software Development - 16****Telecommunications - 14****Travel and Tourism - 15****Visual Design and Imaging - 16****CT-P1-2 Office****CT-P1-3 Storage Area**

6312

**Program Type 2 – Table of Contents**

Spatial Relationship Diagram

Example

**CT-P2-1 Lab****Biotechnology - 7****Biotechnology for Food, Plant, Animal Sciences - 8****Community Health Aide - 10****Criminal Science Technology - 8****Dental Laboratory Technology - 11****Emergency Medical Technician - 12****Energy Science - 7****Exercise Science/Sports & Recreation Health Care - 13****Health Information Management Service - 15****Health Support Pathway - 14****Health Unit Coordinator – 15****Home Health - 10****Medical Laboratory Technology – 8****Pharmacy Technician - 7****Practical Nursing - 16****Therapeutic Pathway - 14****CT-P2-2 Office****CT-P2-3 Storage Area****CT-P2-4 Changing Room**

6313	<p><b><u>Program Type 3 – Table of Contents</u></b>          Spatial Relationship Diagram          Example  <b>CT-P3-1 Lab</b>              <b>Acquisition and Logistics - 15</b>              <b>Early Childhood Education - 7</b>                  <b>Observation Room / Infants Room / Kitchen/Break Room</b>                  <b>Work Room / Toddler Restroom / Reception</b>              <b>Entrepreneurship – 15</b>                  <b>Bookstore / Display</b>              <b>Ground Operations - 19</b>                  <b>Reference Room</b>              <b>Lodging - 21</b>                  <b>Banquet Room</b>              <b>Marketing Communications - 15</b>                  <b>Bookstore/Display</b>              <b>Marketing Management – 15</b>                  <b>Bookstore / Display</b>  <b>CT-P3-2 Office</b>  <b>CT-P3-3 Storage Area</b></p>
6314	<p><b><u>Program Type 4 – Table of Contents</u></b>          Spatial Relationship Diagram          Example  <b>CT-P4-1 Lab</b>              <b>Animal Science and Management (small animal) - 7</b>                  <b>Pet Shop/Clinic/Grooming/Animal Room #1/Animal Room #2/Kennel</b>              <b>Career Paths for the Law Profession - 14</b>                  <b>Weight Room / Interrogation Room</b>              <b>Clinical Health Care Services - 17</b>                  <b>Training Restroom / Laundry Room</b>              <b>Cosmetology - 20</b>                  <b>Dispensary / Laundry Room / Facial Room / Manicure Room /</b>                  <b>Customer Toilet</b>              <b>Criminal Justice - 14</b>                  <b>Weight Room / Interrogation Room</b>              <b>Culinary and Food Service Operations - 26</b>                  <b>Restaurant / Dry Storage</b>              <b>Dental Assistant - 29</b>                  <b>X-Ray Room / Darkroom</b>              <b>Diagnostic Pathway - 32</b>                  <b>Exam Room</b>              <b>Fire Fighter Training - 34</b>                  <b>Weight Room</b>              <b>Media Arts - 36</b>                  <b>Media Arts Control Room/Edit / Vestibule</b>              <b>Medical Assistant – 17</b>                  <b>Training Restroom / Laundry Room</b>              <b>Nurse Assisting - 17</b>                  <b>Training Restroom / Laundry Room</b>              <b>Optometric Occupations - 39</b>                  <b>Exam Room</b></p>

	<ul style="list-style-type: none"> <li><i>Patient Care Technician - 41</i></li> <li><i>Training Restroom / Laundry Room</i></li> <li><i>Performing Arts - 44</i></li> <li><i>Practice Room</i></li> <li><i>Private Security – 14</i></li> <li><i>Weight Room / Interrogation Room</i></li> <li><i>Surgical Technology - 46</i></li> <li><i>Operating Room / Instrument Room / Scrub Room</i></li> </ul>
	<ul style="list-style-type: none"> <li><i>CT-P4-2 Related Classroom</i></li> <li><i>CT-P4-3 Office</i></li> <li><i>CT-P4-4 Storage Area</i></li> <li><i>CT-P4-5 Changing Room</i></li> </ul>
6315	<p><b><u>Program Type 5 – Table of Contents</u></b></p> <p>Spatial Relationship Diagram Example</p> <ul style="list-style-type: none"> <li><b><i>CT-P5-1 Lab</i></b> <ul style="list-style-type: none"> <li><i>Agribusiness and Production Systems - 8</i></li> <li><i>Auto Specialization - 9</i></li> <li><i>Brick, Block, and Cement Masonry - 10</i></li> <li><i>Building and Property Maintenance - 11</i></li> <li><i>Building Technology - 11</i></li> <li><i>Custodial Services - 12</i></li> <li><i>Electrical Trades - 13</i></li> <li><i>Environmental Controls Technologies - 14</i></li> <li><i>Heavy Equipment (Construction) - 15</i></li> <li><i>Integrated Systems Technology - 16</i></li> <li><i>Interior Design and Application - 17</i></li> <li><i>Manufacturing Design and Development - 18</i></li> <li><i>Manufacturing Operations - 18</i></li> <li><i>Natural Resource Management - 19</i></li> <li><i>Plumbing and Pipefitting - 20</i></li> <li><i>Power Equipment Technology - 21</i></li> <li><i>Power Transmission - 22</i></li> <li><i>Welding and Cutting - 23</i></li> </ul> </li> <li><i>CT-P5-2 Related Classroom</i></li> <li><i>CT-P5-3 Office</i></li> <li><i>CT-P5-4 Storage Area</i></li> <li><i>CT-P5-5 Changing Room</i></li> <li><i>CT-P5-6 Tool Crib</i></li> <li><i>CT-P5-7 Reference Room</i></li> <li><i>CT-P5-8 Toilet Room</i></li> </ul>
6316	<p><b><u>Program Type 6 – Table of Contents</u></b></p> <p>Spatial Relationship Diagram Example</p> <ul style="list-style-type: none"> <li><b><i>CT-P6-1 Lab</i></b> <ul style="list-style-type: none"> <li><i>Agriculture/Industrial Equipment - 7</i></li> <li><i>Engine Storage / Flammable Material Storage</i></li> <li><i>Auto Collision Repair - 10</i></li> <li><i>Auto Parts Storage</i></li> <li><i>Auto Technology - 12</i></li> <li><i>Engine Storage / Machine Room / Flammable Material Storage</i></li> </ul> </li> </ul>

	<b>Carpentry - 16</b>
	<i>Finishing Room / Material Storage</i>
	<b>Construction (2 clusters) - 19</b>
	<i>Design/Build / Management / CAD Room</i>
	<b>Engineering Technologies – 21</b>
	<i>CAD Room</i>
	<b>Food Science and Technology - 23</b>
	<i>Freezer / Cooler / Retail</i>
	<b>Horticulture - 27</b>
	<i>Retail</i>
	<b>Medium/Heavy Truck Technician - 29</b>
	<i>Engine Storage / Flammable Material Storage / Machine Room</i>
	<b>Precision Machining - 33</b>
	<i>CNC Room / Inspection Room</i>
	<b>Wood Product Technologies - 36</b>
	<i>Finishing Room / Material Storage</i>
	<b>CT-P6-2 Related Classroom</b>
	<b>CT-P6-3 Office</b>
	<b>CT-P6-4 Storage Area</b>
	<b>CT-P6-5 Changing Room</b>
	<b>CT-P6-6 Tool Crib</b>
	<b>CT-P6-7 Reference Room</b>
	<b>CT-P6-8 Toilet Room</b>

6317

**Program Type 7 – Table of Contents**

Spatial Relationship Diagram

Example

**CT-P7-1 Lab**    ***Animal Science and Management (Equine) - 11***        *Stables*    ***Aircraft Maintenance - 7***        *Cleaning Room / Parts Storage / Hazardous Material Storage***CT-P7-2 Related Classroom****CT-P7-3 Office****CT-P7-4 Storage Area****CT-P7-5 Changing Room****CT-P7-6 Tool Crib****CT-P7-7 Reference Room****CT-P7-8 Toilet Room**

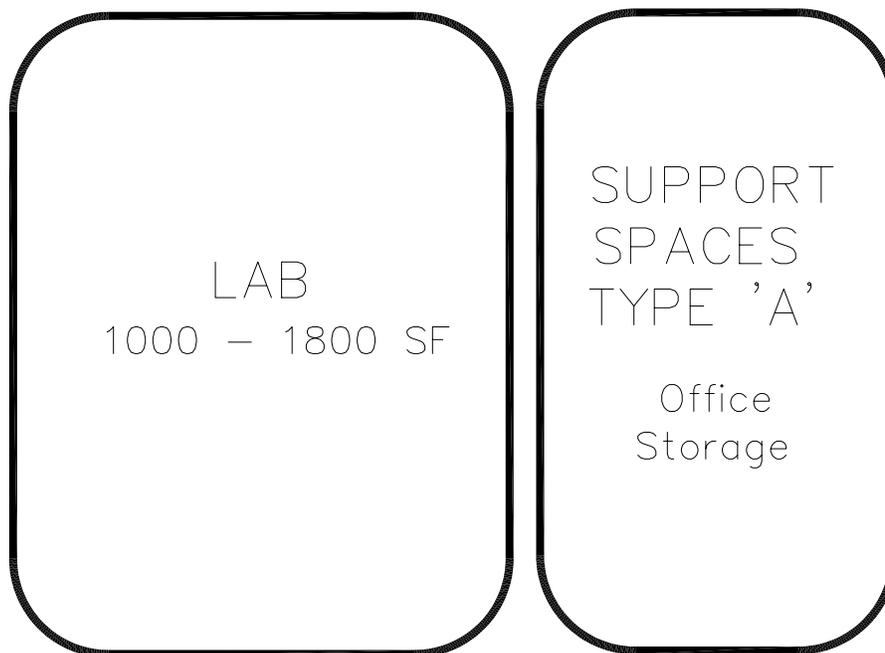
TABLE OF CONTENTS

A.	General Description .....	6311-3
B.	Program Example .....	6311-4
C.	Lab Plate Example .....	6311-5
D.	Lab Descriptions	
	▶ Accounting .....	6311-7
	▶ Administrative and Professional Support.....	6311-8
	▶ Automation & Robotics .....	6311-9
	▶ Aviation Occupations .....	6311-10
	▶ Business Management .....	6311-11
	▶ Electronics .....	6311-9
	▶ Financial Services .....	6311-12
	▶ Information Support & Services .....	6311-16
	▶ Interactive Media .....	6311-16
	▶ Legal Management and Support .....	6311-8
	▶ Medical Management and Support .....	6311-13
	▶ Network Systems .....	6311-16
	▶ Programming and Software Development .....	6311-16
	▶ Telecommunications .....	6311-14
	▶ Travel and Tourism .....	6311-15
	▶ Visual Design and Imaging .....	6311-16
E.	Office Plate .....	6311-17
F.	Storage Area Plate .....	6311-19

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**Program Type 1**

Description: Small to medium sized lab space with typical support space. Lab and support space to have finished floor, painted walls, and suspended acoustical ceiling.

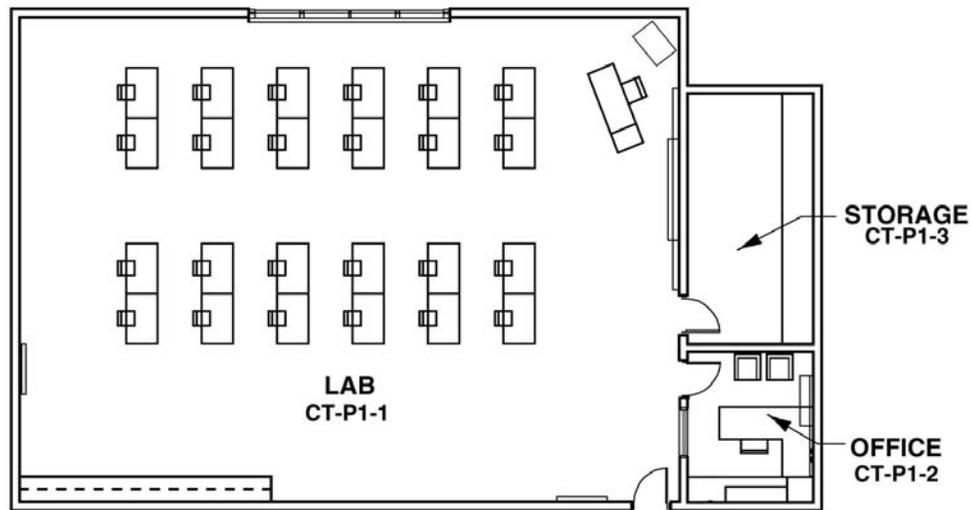
**NOTES:**

This is an example of how the Program Type 1 spaces in a career-technical school could be arranged. This is meant only to demonstrate the relationships between various spaces of this area.

Following are the Program Type 1 space plates:

- CT-P1-1 Lab
- CT-P1-2 Office
- CT-P1-3 Storage

**PROGRAM TYPE 1  
EXAMPLE**

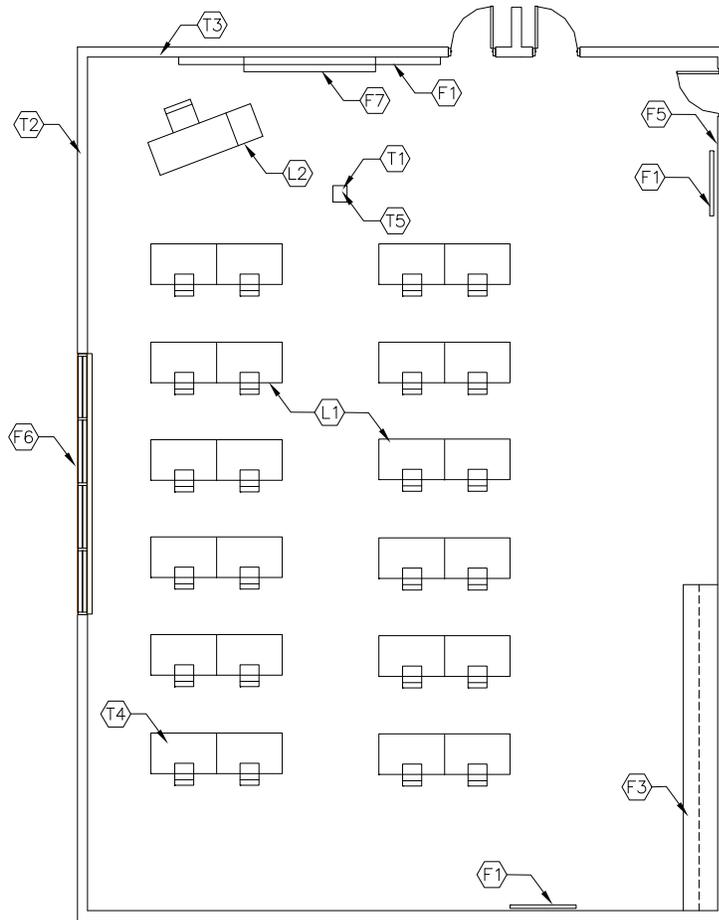


**Program Type 1**

This is an example to show the possible relationships of spaces for this program type.

**NOTES:**

1. See lab descriptions within this section for specific lab requirements.
2. See individual space plates at the end of this section for specific requirements for the storage room and office.



<p><b>CAPACITY:</b> 24 Students  <b>SIZE:</b> 1,000 – 1,800 SF          (see lab summaries for exact sizes)  <b>ANCILLARY SPACES:</b> CT-P1-2 and CT-P1-3</p>	
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**NOTES:**

1. Loose furnishings shown represent one of many possible arrangements.
2. Graphic plate is an example only. Other labs within this program are not drawn – refer to lab summaries within this program type for information on a particular lab.

**LAB**  
**CT-P1-1**

CHAPTER 6: CAREER-TECHNICAL SCHOOL

PROGRAM ACTIVITIES:

- Large and small group instruction
- Group and individual work
- Demonstrations

SPATIAL RELATIONSHIPS:

- Near other related labs
- Adjacent to typical support spaces
- Proximity to large group restrooms
- Located away from noisy or public activities
- Proximity to core academic area and common use areas
- Flexibility of space

ENVIRONMENTAL CONSIDERATIONS:

- **Required: View glass – minimum 5% without daylighting design; minimum 3% with daylighting design.**  
**Recommended: Daylighting design with glazing area determined by design solution.**
- Environmental sound control -  
wall **only** minimum STC **45**  
ceiling minimum CAC 35, NRC 0.70

NOTES:

1. Finishes/Features: Refer to Chapter 9 for specification references.
2. Loose Furnishings: Refer to Lab Profiles within this section.
3. Loose Furnishings, fixed equipment, utility locations, and general footprint of room shown represent one of many possible arrangements.

**14.0100 ACCOUNTING  
CT-P1-1**

CHAPTER 6: CAREER-TECHNICAL SCHOOL

<p><b>PROGRAM DESCRIPTION:</b> Prepares students for careers that record, classify, summarize, analyze and communicate a business's financial information and business transactions. Accounting includes such activities as bookkeeping, systems design, and analysis and interpretation of accounting information. Sample occupations include: certified public accounting (CPA), auditor, financial accountant, accounting clerk, treasurer, bookkeeper, forensic accountant, and international accountant.</p> <p><b>Program Type:</b> 1</p> <p><b>Size Requirements:</b> 1,200 SF Lab</p> <p><b>Lab Requirements:</b></p> <table border="0"> <tr> <td></td> <td style="text-align: right;">Spec.</td> </tr> <tr> <td><u>FINISHES:</u></td> <td style="text-align: right;"><u>Ref #</u></td> </tr> <tr> <td>Flooring:</td> <td></td> </tr> <tr> <td>    Carpet</td> <td style="text-align: right;">096816</td> </tr> <tr> <td>    Optional: ET, sheet vinyl,         or linoleum</td> <td style="text-align: right;">096500 096516</td> </tr> <tr> <td>Base:</td> <td></td> </tr> <tr> <td>    Resilient</td> <td style="text-align: right;">096500</td> </tr> <tr> <td>Ceiling:</td> <td></td> </tr> <tr> <td>    Suspended acoustical</td> <td style="text-align: right;">095113</td> </tr> <tr> <td>Walls:</td> <td></td> </tr> <tr> <td>    Painted concrete masonry units</td> <td style="text-align: right;">042000/ 099100</td> </tr> <tr> <td><u>LOOSE FURNISHINGS:</u></td> <td></td> </tr> <tr> <td>L1 (24) Computer workstation furniture &amp; chairs</td> <td></td> </tr> <tr> <td>L2 (1) Teacher station &amp; chair     Wastebasket</td> <td></td> </tr> </table>		Spec.	<u>FINISHES:</u>	<u>Ref #</u>	Flooring:		Carpet	096816	Optional: ET, sheet vinyl, or linoleum	096500 096516	Base:		Resilient	096500	Ceiling:		Suspended acoustical	095113	Walls:		Painted concrete masonry units	042000/ 099100	<u>LOOSE FURNISHINGS:</u>		L1 (24) Computer workstation furniture & chairs		L2 (1) Teacher station & chair Wastebasket		<p style="text-align: right;">Spec. <u>Ref.#</u></p> <p><u>FEATURES<sup>1</sup>:</u> <u>Fixed Items:</u></p> <table border="0"> <tr> <td>F1</td> <td><b>24' of chalk/marker board, tack board, or tackable wall surface</b></td> <td style="text-align: right;">101100</td> </tr> <tr> <td>F2</td> <td><b>Reserved</b></td> <td></td> </tr> <tr> <td>F3</td> <td><b>40' of base and wall cabinets</b></td> <td style="text-align: right;">123550</td> </tr> <tr> <td>F4</td> <td><b>Reserved</b></td> <td></td> </tr> <tr> <td>F5</td> <td>Pencil sharpener support (<i>optional</i>)</td> <td style="text-align: right;">062000</td> </tr> <tr> <td>F6</td> <td>Windows with integral blinds</td> <td style="text-align: right;">085113</td> </tr> <tr> <td>F7</td> <td>Projection screen, 6'x8'</td> <td style="text-align: right;">115213</td> </tr> </table> <p><u>Fire Suppression:</u></p> <table border="0"> <tr> <td>    Fire suppression system</td> <td style="text-align: right;">211000</td> </tr> </table> <p><u>Plumbing:</u></p> <p style="text-align: right;">N/A</p> <p><u>HVAC:</u></p> <table border="0"> <tr> <td>    Supply/return air system</td> <td style="text-align: right;">Div. 23</td> </tr> <tr> <td>    Independent temperature control</td> <td style="text-align: right;">230923</td> </tr> </table> <p><u>Electrical:</u></p> <table border="0"> <tr> <td>    Fluorescent lighting, parabolic lenses:</td> <td style="text-align: right;">265100</td> </tr> <tr> <td>    Illumination level: See Table 8600-5</td> <td></td> </tr> <tr> <td>    Multilevel switching</td> <td style="text-align: right;">262726</td> </tr> <tr> <td>    6 duplex receptacles</td> <td style="text-align: right;">262726</td> </tr> <tr> <td>    Double duplex receptacle adjacent to         each data and video port</td> <td style="text-align: right;">262726</td> </tr> </table> <p><u>Communications:</u></p> <table border="0"> <tr> <td>T1</td> <td>1 video port</td> <td style="text-align: right;">271533/271543</td> </tr> <tr> <td>T2</td> <td>1 voice port and phone</td> <td style="text-align: right;">271513/<b>273123</b></td> </tr> <tr> <td>T3</td> <td>1 data port near teacher workstation</td> <td style="text-align: right;">271513</td> </tr> <tr> <td>T4</td> <td>26 data ports</td> <td style="text-align: right;">271513</td> </tr> <tr> <td></td> <td>Clock</td> <td style="text-align: right;">275313</td> </tr> <tr> <td></td> <td>Central sound system</td> <td style="text-align: right;">275123</td> </tr> <tr> <td></td> <td>Sound reinforcement system</td> <td style="text-align: right;">275127</td> </tr> <tr> <td>T5</td> <td>Overhead projector</td> <td style="text-align: right;">274119</td> </tr> </table> <p><u>Electronic Safety and Security:</u></p> <table border="0"> <tr> <td>    Life safety devices per code</td> <td style="text-align: right;">283111</td> </tr> </table> <p><u>Miscellaneous:</u></p> <p>    Pencil sharpener (<i>optional</i>)</p>	F1	<b>24' of chalk/marker board, tack board, or tackable wall surface</b>	101100	F2	<b>Reserved</b>		F3	<b>40' of base and wall cabinets</b>	123550	F4	<b>Reserved</b>		F5	Pencil sharpener support ( <i>optional</i> )	062000	F6	Windows with integral blinds	085113	F7	Projection screen, 6'x8'	115213	Fire suppression system	211000	Supply/return air system	Div. 23	Independent temperature control	230923	Fluorescent lighting, parabolic lenses:	265100	Illumination level: See Table 8600-5		Multilevel switching	262726	6 duplex receptacles	262726	Double duplex receptacle adjacent to each data and video port	262726	T1	1 video port	271533/271543	T2	1 voice port and phone	271513/ <b>273123</b>	T3	1 data port near teacher workstation	271513	T4	26 data ports	271513		Clock	275313		Central sound system	275123		Sound reinforcement system	275127	T5	Overhead projector	274119	Life safety devices per code	283111
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1. Finishes/Features: Refer to Chapter 9 for specification references.

**14.0310 ADMINISTRATIVE and PROFESSIONAL SUPPORT**  
**14.0300 LEGAL MANAGEMENT and SUPPORT**  
**CT-P1-1**

CHAPTER 6: CAREER-TECHNICAL SCHOOL

<p><b><u>PROGRAM DESCRIPTION:</u></b>  <b>A&amp;PS:</b> Based on a sequence of courses, students will be prepared for careers which support business operations through a variety of administrative duties including information and communication management, data processing and collection, and project tracking. Due to changes in technology, the skills required in administrative support careers have increased and correspond with that of a mid-level manager. Sample occupations within this pathway include: administrative assistant, customer service representative, executive assistant, office manager, and project coordinator.</p> <p><b>LM&amp;S:</b> Based on a sequence of courses, students will be prepared for careers which facilitate legal operations through a variety of management and administrative duties. Employees in this field are found in law firms, courts, court reporting firms, legal departments of corporate businesses, and government regulatory agencies. Sample occupations within this pathway include: legal office manager, legal assistant, legal secretary, paralegal, court administrator, compliance analyst, and regulatory analyst.</p> <p><b>Program Type:</b> 1  <b>Size Requirements:</b> 1,200 SF Lab  <b>Lab Requirements:</b></p> <p style="text-align: right;">Spec. 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**NOTES:**

1. Finishes/Features: Refer to Chapter 9 for specification references.

**17.1503 ELECTRONICS  
17.0370 AUTOMATION & ROBOTICS  
CT-P1-1**

**CHAPTER 6: CAREER-TECHNICAL SCHOOL**

<p><b><u>PROGRAM DESCRIPTION:</u></b>  <u>Electronics:</u> Classroom, laboratory, and practical learning experiences that includes both theory and practice. Students learn construction, maintenance, and repair of digital, analog, and microprocessor circuits in applications such as communications equipment, consumer equipment, and industrial equipment.  <u>Automation &amp; Robotics:</u> Utilizing business and Industry, math, English, science and technology standards, introduces concepts in Automation and Robotics technologies: Computer Numerical Control (CNC), Data Acquisition and Analysis, Electrical/Electronic controls, Fluid Power, Robotics and Programmable Logic Controllers (PLC).</p> <p><b>Program Type:</b> 1</p> <p><b>Size Requirements:</b> 1,800 SF Lab</p> <p><b>Lab Requirements:</b></p> <table border="0"> <tr> <td></td> <td align="right">Spec. 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**NOTES:**

1. Finishes/Features: Refer to Chapter 9 for specification references.

**17.0400 AVIATION OCCUPATIONS  
CT-P1-1**

CHAPTER 6: CAREER-TECHNICAL SCHOOL

<b><u>PROGRAM DESCRIPTION:</u></b>		<b>Spec.</b>	
Classroom and practical experiences that include instruction relating to aircraft maintenance, operation, and ground support. Instructor and program must be certified by the Federal Aviation Administration (FAA).		<b>Ref.#</b>	
<b>Program Type:</b>	1	<b>FEATURES<sup>1</sup>:</b>	
<b>Size Requirements:</b>	1,500 SF Lab	<b>Fixed Items:</b>	
<b>Lab Requirements:</b>		<b>24' of chalk/marker board, tack board, or tackable wall surface</b> 101100	
		Demonstration table/teacher desk 123550	
		60' of perimeter sink base cabinets with 5 sinks 123550	
		30' of wall cabinets 123550	
		Fume hood 115313	
		(5) Paper towel dispensers 102813	
		(1) Safety shower/eyewash 224000	
		Pencil sharpener support ( <i>optional</i> ) 062000	
		Windows with integral blinds 085113	
		Projection screen, 6'x8' 115213	
<b>FINISHES:</b>	<b>Spec. Ref #</b>	<b>Fire Suppression:</b>	
<b>Flooring:</b>		Fire suppression system 211000	
ET, sheet vinyl, or linoleum	096500	<b>Plumbing:</b>	
	096516	Plumbing connections	
<b>Base:</b>		221116/221119/224000	
Resilient	096500	Safety shower/eyewash connections	
		224000	
<b>Ceiling:</b>		Master shut-off for gas 226313	
Suspended acoustical	095113	Gas connections 226313	
		Compressed air connections 221500	
<b>Walls:</b>		<b>HVAC:</b>	
Painted concrete masonry units	042000/ 099100	Supply/return air system Div. 23	
		Independent temperature control 230923	
		Manual exhaust Div. 23	
		Fume hood exhaust Div. 23	
<b>LOOSE FURNISHINGS:</b>		<b>Electrical:</b>	
(12) 2-person work tables w/epoxy tops and gas & electric connections		Fluorescent lighting 265100	
(24) Student stools/chairs		Illumination level: See Table 8600-5	
(1) Teacher chair or stool		Multilevel switching 262726	
(4) Computer workstations		6 duplex receptacles 262726	
Wastebasket		Double duplex receptacle adjacent to each data and video port 262726	
		Emergency lighting 265100	
		Means of egress lighting per code 265100	
<b>Miscellaneous:</b>		<b>Communications:</b>	
<b>Pencil sharpener (optional)</b>		1 video port 271533/271543	
		1 voice port and phone 271513/ <b>273123</b>	
		1 data port near teacher workstation 271513	
		11 data ports 271513	
		Clock 275313	
		Central sound system 275123	
		Sound reinforcement system 275127	
		Overhead projector 274119	
<b>NOTES:</b>		<b>Electronic Safety and Security:</b>	
1. Finishes/Features: Refer to Chapter 9 for specification references.		Life safety devices per code 283111	

**14.0800 BUSINESS MANAGEMENT  
CT-P1-1**

CHAPTER 6: CAREER-TECHNICAL SCHOOL

<p><b><u>PROGRAM DESCRIPTION:</u></b> An instructional program that generally prepares individuals to plan, organize, direct, and control the functions and processes of a firm or organization. Includes instruction in human resources management, strategic planning, managing technology, staffing functions, general office functions, financial functions, telecommunications, and supervisory functions.</p> <p><b>Program Type:</b> 1</p> <p><b>Size Requirements:</b> 1,200 SF Lab</p> <p>Lab Requirements:</p> <table border="0"> <tr> <td></td> <td style="text-align: right;">Spec.</td> </tr> <tr> <td><b><u>FINISHES:</u></b></td> <td style="text-align: right;"><b><u>Ref #</u></b></td> </tr> <tr> <td>Flooring:</td> <td></td> </tr> <tr> <td>    Carpet</td> <td style="text-align: right;">096816</td> </tr> <tr> <td>    Optional: ET, sheet vinyl,     or linoleum</td> <td style="text-align: right;">096500 096516</td> </tr> <tr> <td>Base:</td> <td></td> </tr> <tr> <td>    Resilient</td> <td style="text-align: right;">096500</td> </tr> <tr> <td>Ceiling:</td> <td></td> </tr> <tr> <td>    Suspended acoustical</td> <td style="text-align: right;">095113</td> </tr> <tr> <td>Walls:</td> <td></td> </tr> <tr> <td>    Painted concrete masonry units</td> <td style="text-align: right;">042000/ 099100</td> </tr> <tr> <td><b><u>LOOSE FURNISHINGS:</u></b></td> <td></td> </tr> <tr> <td>L1 (24) Computer workstation furniture &amp; 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**NOTES:**

1. Finishes/Features: Refer to Chapter 9 for specification references.

**14.0110 FINANCIAL SERVICES  
CT-P1-1**

CHAPTER 6: CAREER-TECHNICAL SCHOOL

<p><b><u>PROGRAM DESCRIPTION:</u></b> Prepares students for careers in banking, securities and investments, and insurance. Activities include accepting deposits, lending funds and extending credit, banking services, investments, mortgages and loans, real estate, and insurance. Sample occupations include: loan officer, branch manager, investment banker, financial planner, bank teller, personal financial advisor, real estate broker, and credit analyst.</p> <p><b>Program Type:</b> 1</p> <p><b>Size Requirements:</b> 1,200 SF Lab</p> <p>Lab Requirements:</p> <table border="0"> <tr> <td></td> <td style="text-align: right;">Spec.</td> </tr> <tr> <td><b><u>FINISHES:</u></b></td> <td style="text-align: right;"><b><u>Ref #</u></b></td> </tr> <tr> <td colspan="2"><b>Flooring:</b></td> </tr> <tr> <td>Carpet</td> <td style="text-align: right;">096816</td> </tr> <tr> <td>Optional: ET, sheet vinyl, or linoleum</td> <td style="text-align: right;">096500 096516</td> </tr> <tr> <td colspan="2"><b>Base:</b></td> </tr> <tr> <td>Resilient</td> <td style="text-align: right;">096500</td> </tr> <tr> <td colspan="2"><b>Ceiling:</b></td> </tr> <tr> <td>Suspended acoustical</td> <td style="text-align: right;">095113</td> </tr> <tr> <td colspan="2"><b>Walls:</b></td> </tr> <tr> <td>Painted concrete masonry units</td> <td style="text-align: right;">042000/ 099100</td> </tr> <tr> <td colspan="2"><b><u>LOOSE FURNISHINGS:</u></b></td> </tr> <tr> <td>L1 (24) Computer workstation furniture &amp; 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**NOTES:**

1. Finishes/Features: Refer to Chapter 9 for specification references.

**14.0320 MEDICAL MANAGEMENT AND SUPPORT**

**CHAPTER 6: CAREER-TECHNICAL SCHOOL**

**CT-P1-1**

<b><u>PROGRAM DESCRIPTION:</u></b>	<b>FEATURES<sup>1</sup>:</b>	Spec.
Based on a sequence of courses, students will be prepared for careers which facilitate medical business operations, through a variety of management and administrative duties. Employees in this field are found in medical offices, hospitals, and insurance companies. Sample occupations within this pathway include: admissions specialists, benefits coordinators, medical billing specialists, medical records and health information technician, medical office manager, claims processor, and medical coding specialist.	<b><u>Fixed Items:</u></b>	<b><u>Ref.#</u></b>
<b>Program Type:</b> 1	F1 <b>24' of chalk/marker board, tack board, or tackable wall surface</b>	101100
<b>Size Requirements:</b> 1,200 SF Lab	F2 <b>Reserved</b>	
<b>Lab Requirements:</b>	F3 <b>40' of base and wall cabinets</b>	123550
<b><u>FINISHES:</u></b>	F4 <b>Reserved</b>	
<b>Flooring:</b>	F5 Pencil sharpener support ( <i>optional</i> )	062000
ET, sheet vinyl, or linoleum	F6 Windows with integral blinds	085113
Optional: carpet	F7 Projection screen, 6'x8'	115213
<b>Base:</b>	Paper towel dispenser	102813
Resilient	<b><u>Fire Suppression:</u></b>	
<b>Ceiling:</b>	Fire suppression system	211000
Suspended acoustical	<b><u>Plumbing:</u></b>	
<b>Walls:</b>	Plumbing connections	
Painted concrete masonry units	221116/221119/224000	
042000/ 099100	<b><u>HVAC:</u></b>	
<b><u>LOOSE FURNISHINGS:</u></b>	Supply/return air system	Div. 23
(12) Two-person work stables	Independent temperature control	230923
(24) Student chairs/stools	<b><u>Electrical:</u></b>	
(1) Teacher station & chair	Fluorescent lighting:	265100
Wastebasket	Illumination level: See Table 8600-5	
	Multilevel switching	262726
	6 duplex receptacles	262726
	Double duplex receptacle adjacent to	
	each data and video port	262726
	<b><u>Communications:</u></b>	
	1 video port	271533/271543
	1 voice port and phone	271513/ <b>273123</b>
	1 data port near teacher workstation	271513
	8 data ports	271513
	Clock	275313
	Central sound system	275123
	Sound reinforcement system	275127
	Overhead projector	274119
	<b><u>Electronic Safety and Security:</u></b>	
	Life safety devices per code	283111
	<b><u>Miscellaneous:</u></b>	
	<b>Pencil sharpener (<i>optional</i>)</b>	

**NOTES:**

1. Finishes/Features: Refer to Chapter 9 for specification references.

**17.1504 TELECOMMUNICATIONS**  
**CT-P1-1**

## CHAPTER 6: CAREER-TECHNICAL SCHOOL

		Spec. Ref.#
<b><u>PROGRAM DESCRIPTION:</u></b>		
Specialized classroom and practical experiences concerned with the assembly, installation, operation, maintenance, and repair of telephone equipment, which includes pole climbing, cable construction, cable splicing, cable pulling, job planning, equipment wiring, trouble-shooting procedures of PBX systems, and field repair of telephones.		
<b>Program Type:</b>	1	
<b>Size Requirements:</b>	1,200 SF Lab	
Lab Requirements:		
	Spec. <u>Ref #</u>	
<b><u>FINISHES:</u></b>		
Flooring:		
Carpet	096816	
Optional: ET, sheet vinyl, or linoleum	096500 096516	
Base:		
Resilient	096500	
Ceiling:		
Suspended acoustical	095113	
Walls:		
Painted concrete masonry units	042000/ 099100	
<b><u>LOOSE FURNISHINGS:</u></b>		
L1 (24) Computer workstation furniture & chairs		
L2 (1) Teacher station & chair		
Wastebasket		
<b><u>FEATURES<sup>1</sup>:</u></b>		
<b><u>Fixed Items:</u></b>		
F1	<b>24' of chalk/marker board, tack board, or tackable wall surface</b>	101100
F2	<b>Reserved</b>	
F3	<b>40' of base and wall cabinets</b>	123550
F4	<b>Reserved</b>	
F5	Pencil sharpener support ( <i>optional</i> )	062000
F6	Windows with integral blinds	085113
F7	Projection screen, 6'x8'	115213
<b><u>Fire Suppression:</u></b>		
	Fire suppression system	211000
<b><u>Plumbing:</u></b>		
	N/A	
<b><u>HVAC:</u></b>		
	Supply/return air system	Div. 23
	Independent temperature control	230923
<b><u>Electrical:</u></b>		
	Fluorescent lighting, parabolic lenses:	265100
	Illumination level: See Table 8600-5	
	Multilevel switching	262726
	6 duplex receptacles	262726
	Double duplex receptacle adjacent to each data and video port	262726
<b><u>Communications:</u></b>		
T1	1 video port	271533/271543
T2	1 voice port and phone	271513/ <b>273123</b>
T3	1 data port near teacher workstation	271513
T4	26 data ports	271513
	Clock	275313
	Central sound system	275123
	Sound reinforcement system	275127
T5	Overhead projector	274119
<b><u>Electronic Safety and Security:</u></b>		
	Life safety devices per code	283111
<b><u>Miscellaneous:</u></b>		
	<b>Pencil sharpener (<i>optional</i>)</b>	

**NOTES:**

1. Finishes/Features: Refer to Chapter 9 for specification references.

**33.0200 TRAVEL AND TOURISM  
CT-P1-1**

CHAPTER 6: CAREER-TECHNICAL SCHOOL

<p><b><u>PROGRAM DESCRIPTION:</u></b> Educational programs in travel and tourism prepare learners for careers in management, marketing and operation of destination marketing organizations, attractions, meetings and events, transportation, and travel related services.</p> <p><b>Program Type:</b> 1</p> <p><b>Size Requirements:</b> 1,200 SF Lab</p> <p>Lab Requirements:</p>		<p style="text-align: right;">Spec. Ref.#</p> <p><b><u>FEATURES<sup>1</sup>:</u></b> <b><u>Fixed Items:</u></b></p> <p>F1 <b>24' of chalk/marker board, tack board, or tackable wall surface</b> 101100</p> <p>F2 <b>Reserved</b></p> <p>F3 <b>40' of base and wall cabinets</b> 123550</p> <p>F4 <b>Reserved</b></p> <p>F5 Pencil sharpener support (<i>optional</i>) 062000</p> <p>F6 Windows with integral blinds 085113</p> <p>F7 Projection screen, 6'x8' 115213</p> <p><b><u>Fire Suppression:</u></b> Fire suppression system 211000</p> <p><b><u>Plumbing:</u></b> N/A</p> <p><b><u>HVAC:</u></b> Supply/return air system Div. 23 Independent temperature control 230923</p> <p><b><u>Electrical:</u></b> Fluorescent lighting, parabolic lenses:265100 Illumination level: See Table 8600-5 Multilevel switching 262726 6 duplex receptacles 262726 Double duplex receptacle adjacent to each data and video port 262726</p> <p><b><u>Communications:</u></b> T1 1 video port 271533/271543 T2 1 voice port and phone 271513/<b>273123</b> T3 1 data port near teacher workstation 271513 T4 26 data ports 271513 Clock 275313 Central sound system 275123 Sound reinforcement system 275127 T5 Overhead projector 274119</p> <p><b><u>Electronic Safety and Security:</u></b> Life safety devices per code 283111</p> <p><b><u>Miscellaneous:</u></b> <b><i>Pencil sharpener (optional)</i></b></p>
<p><b><u>FINISHES:</u></b></p> <p><b>Flooring:</b></p> <p>Carpet 096816 Optional: ET, sheet vinyl, or linoleum 096500 096516</p> <p><b>Base:</b></p> <p>Resilient 096500</p> <p><b>Ceiling:</b></p> <p>Suspended acoustical 095113</p> <p><b>Walls:</b></p> <p>Painted concrete masonry units 042000/ 099100</p> <p><b><u>LOOSE FURNISHINGS:</u></b> L1 (24) Computer workstation furniture &amp; chairs L2 (1) Teacher station &amp; chair Wastebasket</p>		

**NOTES:**

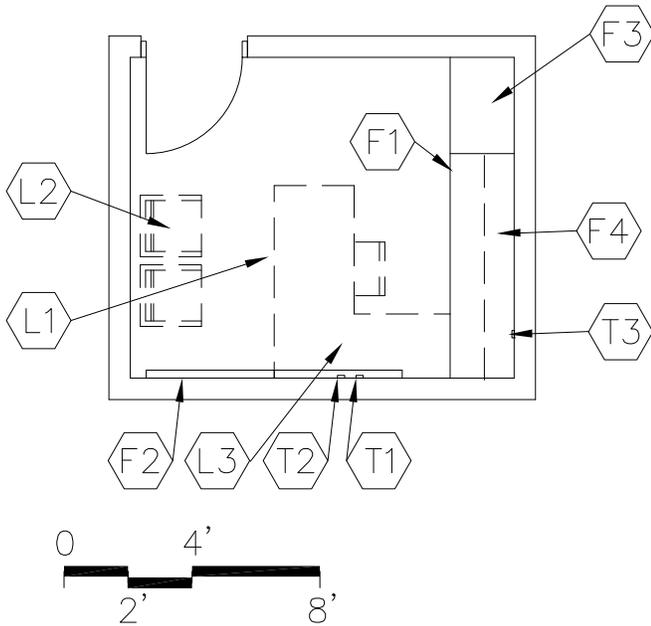
1. Finishes/Features: Refer to Chapter 9 for specification references.

**34.0005 VISUAL DESIGN AND IMAGING ■ 14.0210 INFORMATION SUPPORT & SERVICES  
14.0230 PROGRAMMING and SOFTWARE DEVELOPMENT  
14.0220 NETWORK SYSTEMS ■ 14.0240 INTERACTIVE MEDIA**

**CT-P1-1**

CHAPTER 6: CAREER-TECHNICAL SCHOOL

<p><b>PROGRAM DESCRIPTION:</b>  <u>VD&amp;I:</u> Programs that focus on the creation, design, and execution of layouts and illustrations on various mediums including electronic media and the theory and processes of image transfer, including offset, flexography, lithography, photoengraving and other techniques. Communications, business principles and leadership skill development related to the industry are essential to the program. Specialization areas include commercial art and graphic occupations.  <u>IS&amp;S:</u> An instructional program that provides training for careers in dealing in information technology deployment and information systems management.  <u>P&amp;SD:</u> An instructional program that provides training for careers dealing with hardware and software programming, to design, development, and implementation computer systems and software.  <u>NS:</u> An instructional program that provides training for careers in communication network system planning, administration, and management. Skills for programs/pathways in this are taken from the itWORKS.OHIO Career Field Technical Content Standards.  <u>IM:</u> An instructional program that provides training in the area of interactive mutli-media development that includes creating, designing, and producing interactive multimedia products and services and digitally-generated or computer-enhanced media.</p>	<p>Spec. Ref.#</p>
	<p><b>FEATURES<sup>1</sup>:</b>  <b>Fixed Items:</b></p> <p>F1 <b>24' of chalk/marker board, tack board, or tackable wall surface</b> 101100                  F2 <b>Reserved</b>                  F3 <b>40' of base and wall cabinets</b> 123550                  F4 <b>Reserved</b>                  F5 Pencil sharpener support (<i>optional</i>) 062000                  F6 Windows with integral blinds 085113                  F7 Projection screen, 6'x8' 115213</p> <p><b>Fire Suppression:</b>                  Fire suppression system 211000</p> <p><b>Plumbing:</b>                  N/A</p> <p><b>HVAC:</b>                  Supply/return air system Div. 23                  Independent temperature control 230923</p> <p><b>Electrical:</b>                  Fluorescent lighting, parabolic lenses:265100                  Illumination level: See Table 8600-5                  Multilevel switching 262726                  6 duplex receptacles 262726                  Double duplex receptacle adjacent to each data and video port 262726</p> <p><b>Communications:</b>                  T1 1 video port 271533/271543                  T2 1 voice port and phone 271513/<b>273123</b>                  T3 1 data port near teacher workstation271513                  T4 26 data ports 271513                  Clock 275313                  Central sound system 275123                  Sound reinforcement system 275127                  T5 Overhead projector 274119</p> <p><b>Electronic Safety and Security:</b>                  Life safety devices per code 283111</p> <p><b>Miscellaneous:</b>  <b>Pencil sharpener (optional)</b></p> <p><b>LOOSE FURNISHINGS:</b>                  L1 (24) Computer workstation furniture &amp; chairs                  L2 (1) Teacher station &amp; chair                  Wastebasket</p>
<p><b>Program Type:</b> 1  <b>Size Requirements:</b> 1,200 SF Lab  <b>Lab Requirements:</b> Spec.  <b>FINISHES:</b> Ref #</p> <p><b>Flooring:</b>                  Carpet 096816                  Optional: ET, sheet vinyl, 096500                  or linoleum 096516                  Base: Resilient 096500  <b>Ceiling:</b>                  Suspended acoustical 095113  <b>Walls:</b>                  Painted concrete masonry units 042000/                  099100</p>	
<p><b>NOTES:</b>                  1. Finishes/Features: Refer to Chapter 9 for specification references.</p>	



**PROGRAM ACTIVITIES:**

- Private space for program instructor
- One-on-one conferences with academic instructors, students, etc.

**SPATIAL RELATIONSHIPS:**

- Near related lab
- Direct access to school circulation areas

**ENVIRONMENTAL CONSIDERATIONS:**

- Environmental sound control -  
wall minimum STC 45  
ceiling minimum CAC 35, NRC 0.70

CAPACITY: 1 - 3 persons  
SIZE: 120 SF

**NOTES:**

1. Loose furnishings shown represent one of many possible arrangements.

**OFFICE  
CT-P1-2**

## CHAPTER 6: CAREER-TECHNICAL SCHOOL

<u>FINISHES<sup>1</sup>:</u>	Spec. Ref.#	<u>FEATURES<sup>1</sup>:</u>	Spec. Ref.#
Flooring:		<u>Fixed Items:</u>	
Carpet or carpet tile	096816	F1 Work surface with file drawers	123550
	096813	F2 4' of tack board	101100
		or tackable wall surface	
Base:		F3 Tall wardrobe	123550
Resilient base	096500	F4 Wall cabinets above work surface	123550
Ceiling:		<u>Fire Suppression:</u>	
Suspended, acoustical	095113	Fire suppression system	211000
Walls:		<u>Plumbing:</u>	
Painted gypsum wallboard		N/A	
over metal studs	092116/099100		
<u>LOOSE FURNISHINGS:</u>		<u>HVAC:</u>	
L1 Desk and chair		Supply/return air system	Div. 23
L2 Visitor chairs		Independent temperature control	230923
L3 Computer desk return			
Wastebasket		<u>Electrical:</u>	
		Single level switching	262726
		Fluorescent lighting	265100
		Illumination level: See Table 8600-5	
		4 duplex receptacles	262726
		Double duplex receptacle adjacent	
		to data and video port	262726
		<u>Communications:</u>	
		T1 1 voice port and phone	271513/ <b>273123</b>
		T2 1 data port near workstation	271513
		T3 1 video port	271533/271543
		Central sound system	275123
		Clock	275313
		<u>Electronic Safety and Security:</u>	
		Life safety devices per code	283111
		<u>Miscellaneous:</u>	
		N/A	

NOTES:

1. Finishes/Features: Refer to Chapter 9 for specification references. Optional: moveable cabinets
2. Fixed casework and loose furnishings can also be all fixed casework or all loose furnishings.

**PROGRAM ACTIVITIES:**

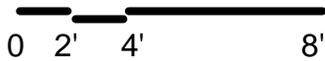
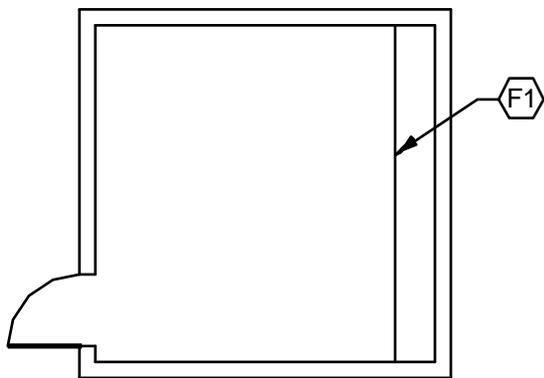
- Space for storage of lab equipment

**SPATIAL RELATIONSHIPS:**

- Near related lab

**ENVIRONMENTAL CONSIDERATIONS:**

N/A



CAPACITY:  
SIZE:

N/A  
200 SF

NOTES:

**STORAGE AREA  
CT-P1-3**
**CHAPTER 6: CAREER-TECHNICAL SCHOOL**

<u>FINISHES<sup>1</sup>:</u>	Spec. Ref.#	<u>FEATURES<sup>1</sup>:</u>	Spec. Ref.#
Flooring:		<u>Fixed Items<sup>1</sup>:</u>	
<b>Sealed</b> concrete	033000	F1 8'-20' of open shelving	
		Depth may vary (fixed or loose)	123550
Base:		<u>Fire Suppression:</u>	
Resilient base	096500	Fire suppression system	211000
Ceiling:		<u>Plumbing:</u>	
Exposed structure	---	N/A	
Walls:		<u>HVAC:</u>	
Painted concrete masonry units	042000/099100	To be determined by Design Professional	
		Supplemental heat as required	Div. 23
<u>LOOSE FURNISHINGS:</u>		<u>Electrical:</u>	
N/A		Single level switching	262726
		Fluorescent lighting	265100
		Illumination level: See Table 8600-5	
		Duplex receptacles	262726
		<u>Communications:</u>	
		N/A	
		<u>Electronic Safety and Security:</u>	
		Life safety devices per code	283111
		<u>Miscellaneous:</u>	
		N/A	

**NOTES:**

1. Finishes/Features: Refer to Chapter 9 for specification references.

TABLE OF CONTENTS

A.	General Description .....	6312-3
B.	Program Example .....	6312-4
C.	Lab Plate Example .....	6312-5
D.	Lab Descriptions	
	▶ Biotechnology .....	6312-7
	▶ Biotechnology for Food, Plant, Animal Science.....	6312-8
	▶ Community Health Aide.....	6312-10
	▶ Criminal Science Technology .....	6312-8
	▶ Dental Laboratory Technology .....	6312-11
	▶ Emergency Medical Technician .....	6312-12
	▶ Energy Science .....	6312-7
	▶ Exercise Science/Sports & Recreation Health Care.....	6312-13
	▶ Health Information Management Service.....	6312-15
	▶ Health Support Pathway.....	6312-14
	▶ Health Unit Coordinator.....	6312-15
	▶ Home Health .....	6312-10
	▶ Medical Laboratory Technology.....	6312-8
	▶ Pharmacy <b>Technician</b> .....	6312-7
	▶ Practical Nursing.....	6312-16
	▶ Therapeutic Pathway .....	6312-14
E.	Office Plate .....	6312-17
F.	Storage Area Plate .....	6312-19
G.	Changing Room Plate .....	6312-21

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**Program Type 2**

Description: Small to medium sized lab space with typical support space. This program is to utilize standard construction and be one-story (16' +/- tall). Lab and support space to have finished floor, painted walls, and suspended acoustical ceiling.



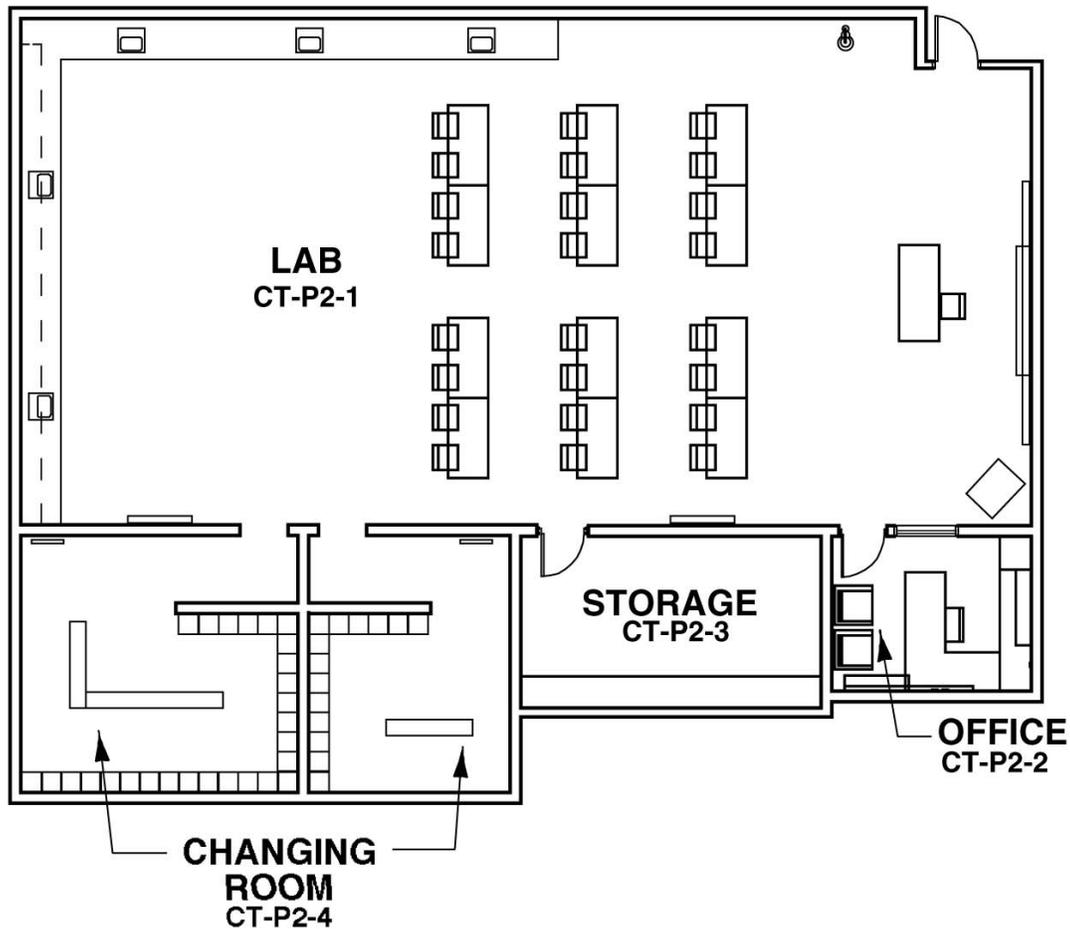
## NOTES:

This is an example of how the Program Type 2 spaces in a career-technical school could be arranged. This is meant only to demonstrate the relationships between various spaces of this area.

Following are the Program Type 2 space plates:

- CT-P2-1 Lab
- CT-P2-2 Office
- CT-P2-3 Storage
- CT-P2-4 Changing Room

**PROGRAM TYPE 2  
EXAMPLE**

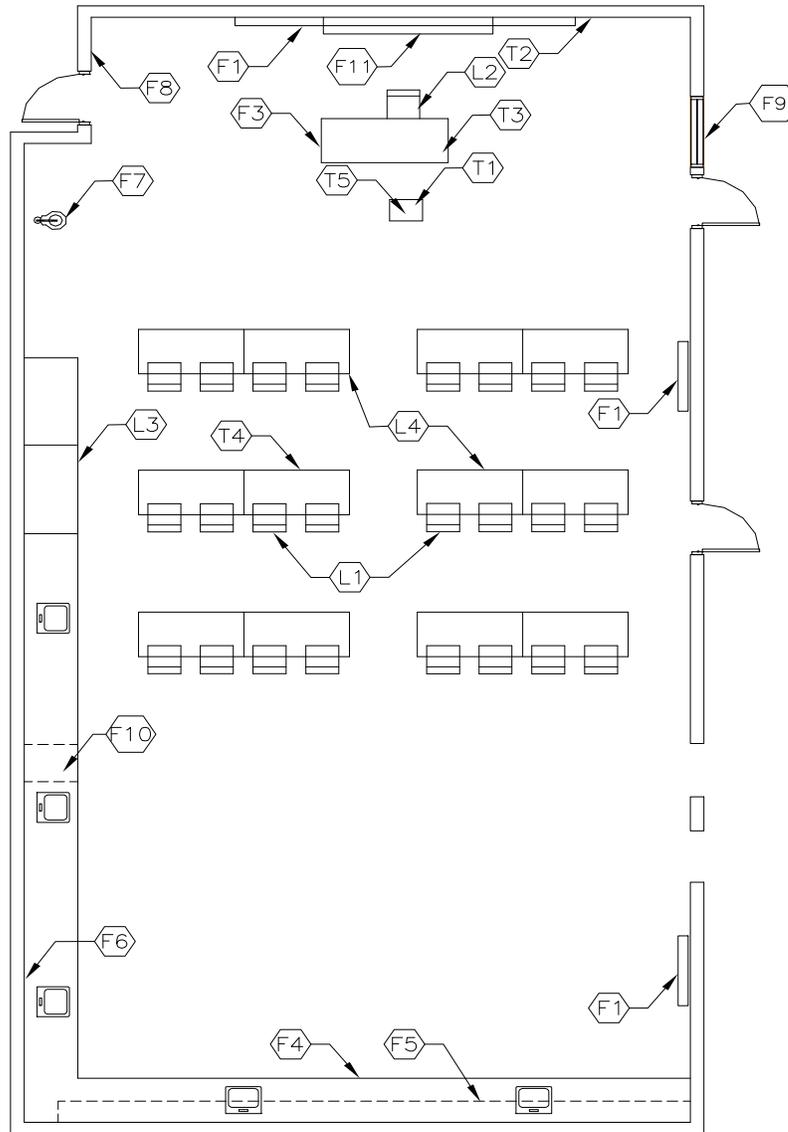


**Program Type 2**

This is an example to show the possible relationships of spaces for this program type.

**NOTES:**

1. See lab descriptions within this section for specific lab requirements.
2. See individual space plates at the end of this section for specific requirements for the office, storage room, and changing room.



CAPACITY:	24 Students
SIZE:	1,500 SF
(see lab summaries for exact sizes)	
ANCILLARY SPACES:	CT-P2-2 thru CT-P2-4

**NOTES:**

1. Loose furnishings shown represent one of many possible arrangements.
2. Graphic plate is an example only. Other labs within this program are not drawn – refer to lab summaries within this program type for information on a particular lab.

**LAB**  
**CT-P2-1**

CHAPTER 6: CAREER-TECHNICAL SCHOOL

PROGRAM ACTIVITIES:

- Large and small group instruction
- Group and individual work
- Demonstrations

SPATIAL RELATIONSHIPS:

- Near other related labs
- Adjacent to typical support spaces
- Proximity to large group restrooms
- Located away from noisy or public activities
- Proximity to core academic area and common use areas
- Flexibility of space

ENVIRONMENTAL CONSIDERATIONS:

- **Required: View glass – minimum 5% without daylighting design; minimum 3% with daylighting design.**  
**Recommended: Daylighting design with glazing area determined by design solution.**
- Environmental sound control -  
wall **only** minimum STC **45**  
ceiling minimum CAC 35, NRC 0.70

NOTES:

1. Finishes/Features: Refer to Chapter 9 for specification references.
2. Loose Furnishings: Refer to Lab Profiles within this section.
3. Loose Furnishings, fixed equipment, utility locations, and general footprint of room shown represent one of many possible arrangements.

**17.1600 ENERGY SCIENCE  
17.0912 PHARMACY TECHNICIAN  
07.4850 BIOTECHNOLOGY  
CT-P2-1**

CHAPTER 6: CAREER-TECHNICAL SCHOOL

<p><b>PROGRAM DESCRIPTION:</b>  <u>Energy Science:</u> Utilizing industry standards and a math, science, ELA and a technology framework introduces concepts of solar, wind, fossil fuel, nuclear, geothermal, biomass, and fuel cell energy and leads to post-secondary.  <u>Pharmacy Technician:</u> Utilizing business and industry technical standards, math, science, ELA, social studies and technology within a business process framework. Instruction includes concepts, subject matter and experiences to work in a pharmacy under the supervision of a pharmacist.  <u>Biotechnology:</u> A tech prep program that combines classroom and laboratory experiences in the bioprocesses of organisms, cells, or their components to create products or solve problems. Program concentrates on biomedical, environmental, pharmaceutical, bioinformatics, and bioethics.</p> <p><b>Program Type:</b> 2  <b>Size Requirements:</b> 1,500 SF Lab  <b>Lab Requirements:</b></p> <p><u>FINISHES:</u>  Flooring:  ET, rubber, sheet vinyl, linoleum, 096500  polished concrete finishing, 096516  or colored concrete finishing 033510  Optional: carpet 033519  096816</p> <p>Base: Resilient 096500  Ceiling:  Suspended acoustical 095113</p> <p>Walls:  Painted concrete masonry units 042000/  099100</p> <p><u>LOOSE FURNISHINGS:</u>  (12) Two-person work tables w/epoxy tops  (24) Students chairs/stools  (1) Teacher station &amp; chair  (4) Computer workstations  Wastebasket</p>	<p style="text-align: right;">Spec. Ref.#</p> <p><u>FEATURES<sup>1</sup>:</u>  <u>Fixed Items:</u>  <b>24' of chalk/marker board, tack board,  or tackable wall surface</b> 101100  <b>Reserved</b>  <b>40' of base and wall cabinets</b> 123550  <b>Reserved</b>  8' of counter (retail area) 123550  8' of counter (nurse's station) 123550  Biohazard hood 123550  Pencil sharpener support (<i>optional</i>) 062000  Windows with integral blinds 085113  Projection screen, 6'x8' 115213  (2) Paper towel dispensers 102813</p> <p><u>Fire Suppression:</u>  Fire suppression system 211000</p> <p><u>Plumbing:</u>  Plumbing connections  221116/221119/224000</p> <p><u>HVAC:</u>  Supply/return air system Div. 23  Independent temperature control 230923  Biohazard hood exhaust Div. 23</p> <p><u>Electrical:</u>  Fluorescent lighting 265100  Illumination level: See Table 8600-5  Multilevel switching 262726  6 duplex receptacles (minimum) 262726  Double duplex receptacle adjacent to  each data and video port 262726</p> <p><u>Communications:</u>  1 video port 271533/271543  1 voice port and phone 271513/<b>273123</b>  1 data port near teacher workstation 271513  8 data ports 271513  Clock 275313  Central sound system 275123  Sound reinforcement system 275127  Overhead projector 274119</p> <p><u>Electronic Safety and Security:</u>  Life safety devices per code 283111</p> <p><u>Miscellaneous:</u> <b>Pencil sharpener (optional)</b></p>
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**NOTES:**

1. Finishes/Features: Refer to Chapter 9 for specification references.

**01.2000 BIOTECHNOLOGY FOR FOOD, PLANT, ANIMAL SCIENCES**  
**07.0203 MEDICAL LABORATORY TECHNOLOGY**  
**17.2815 CRIMINAL SCIENCE TECHNOLOGY**  
**CT-P2-1**

## CHAPTER 6: CAREER-TECHNICAL SCHOOL

**PROGRAM DESCRIPTION:**

**BFPAS:** Applies principles of chemistry, microbiology and genetics to plant and animal research. The focus of this research is to enhance the production and physical attributes of plants and animals, as well as to generate animal and plant products used today in transportation, manufacturing, medicine, food production and environmental protection.

**MLT:** A combination of subject matter and experiences designed to prepare to work under the supervision of medical technologist, clinical pathologist, or physician to perform routine clinical laboratory procedures and specimen collection techniques including phlebotomy.

**CST:** Utilizing business and industry standards as framework for application of clinical and criminal laboratory science, evidentiary testing and analysis, study of society's formal control system, investigative techniques, criminal law, criminal process, administration of Justice System computer applications, record-keeping, and reconstruction techniques.

**Program Type:** 2

**Size Requirements:** 1,500 SF Lab

**Lab Requirements:****FINISHES:**

## Flooring:

	Spec. Ref #
ET, rubber, linoleum, sheet vinyl,	096500
polished concrete finishing,	096516
or colored concrete finishing	033510
	033519

## Base:

Resilient	096500
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## Ceiling:

Suspended acoustical	095113
----------------------	--------

## Walls:

Painted concrete masonry units	042000/ 099100
--------------------------------	-------------------

**LOOSE FURNISHINGS:**

L1 (24) Student stools/chairs  
 L2 (1) Teacher chair or stool  
 L3 (4) Computer workstations  
 L4 (12) 2-person work tables with epoxy tops  
     with gas and electric  
 Wastebasket

**NOTES:**

1. Finishes/Features: Refer to Chapter 9 for specification references.

**01.2000 BIOTECHNOLOGY FOR FOOD, PLANT, ANIMAL SCIENCES**  
**07.0203 MEDICAL LABORATORY TECHNOLOGY**  
**17.2815 CRIMINAL SCIENCE TECHNOLOGY**

CHAPTER 6: CAREER-TECHNICAL SCHOOL

**CT-P2-1**

	Spec. Ref.#
<u>FEATURES<sup>1</sup>:</u>	
<u>Fixed Items:</u>	
F1 <b>24' of chalk/marker board, tack board, or tackable wall surface</b>	101100
F2 <b>Reserved</b>	
F3 Demonstration table/teacher desk	123550
F4 60' of perimeter sink base cabinets with 5 sinks	123550
F5 30' of wall cabinets	123550
F6 (5) Paper towel dispensers	102813
F7 Safety shower/eyewash	224500
F8 Pencil sharpener support ( <i>optional</i> )	062000
F9 Windows with integral blinds	085113
F10 Undercounter refrigerator	113100
F11 Projection screen, 6'x8'	115213
<u>Fire Suppression:</u>	
Fire suppression system	211000
<u>Plumbing:</u>	
Plumbing connections	221116/221119/224000
Safety shower/eyewash connections	224000
Master shut-off for gas	226313
Gas connections	226313
<u>HVAC:</u>	
Supply/return air system	Div. 23
Independent temperature control	230923
Manual exhaust	Div. 23
<u>Electrical:</u>	
Fluorescent lighting, parabolic lenses:	265100
Illumination level: See Table 8600-5	
Multilevel switching	262726
6 duplex receptacles (minimum)	262726
Double duplex receptacle adjacent to each data and video port	262726
Means of egress lighting per code	265100
<u>Communications:</u>	
T1 1 video port	271533/271543
T2 1 voice port and phone	271513/ <b>273123</b>
T3 1 data port at demonstration table	271513
T4 11 data ports for <b>classroom technology</b>	271513
Clock	275313
Central sound system	275123
Sound reinforcement system	275127
T5 Overhead projector	274119
<u>Electronic Safety and Security:</u>	
Life safety devices per code	283111
<u>Miscellaneous:</u>	
<b>Pencil sharpener (optional)</b>	

**07.0906 COMMUNITY HEALTH AIDE  
07.0307 HOME HEALTH  
CT-P2-1**

CHAPTER 6: CAREER-TECHNICAL SCHOOL

<p><b><u>PROGRAM DESCRIPTION:</u></b>  <b>CHA:</b> Utilizing business and industry technical standards, math, science, ELA, social studies and technology within a business process framework. Instruction includes concepts, subject matter and experience to serve as a liaison between professional health workers and the recipients of health services.  <b>HH:</b> Utilizing business and industry technical standards, math, science, ELA, social studies and technology within a business process framework. Introduces concepts, subject matter and experiences to assist elderly, convalescent, or handicapped in their homes for daily living needs.</p> <p><b>Program Type:</b> 2</p> <p><b>Size Requirements:</b> 1,500 SF Lab</p> <p><b>Lab Requirements:</b></p> <table border="0"> <tr> <td style="width: 300px;"><b><u>FINISHES:</u></b></td> <td style="text-align: right;"><b>Spec. Ref #</b></td> </tr> <tr> <td>Flooring:</td> <td></td> </tr> <tr> <td>ET, rubber, sheet vinyl, linoleum, polished concrete finishing, or colored concrete finishing</td> <td style="text-align: right; vertical-align: top;">096500 096516 033510 033519</td> </tr> <tr> <td>Base:</td> <td></td> </tr> <tr> <td>Resilient</td> <td style="text-align: right;">096500</td> </tr> <tr> <td>Ceiling:</td> <td></td> </tr> <tr> <td>Suspended acoustical</td> <td style="text-align: right;">095113</td> </tr> <tr> <td>Walls:</td> <td></td> </tr> <tr> <td>Painted concrete masonry units</td> <td style="text-align: right; vertical-align: top;">042000/ 099100</td> </tr> <tr> <td><b><u>LOOSE FURNISHINGS:</u></b></td> <td></td> </tr> <tr> <td>(12) Two-person work tables</td> <td></td> </tr> <tr> <td>(24) Students chairs/stools</td> <td></td> </tr> <tr> <td>(1) Teacher station &amp; chair</td> <td></td> </tr> <tr> <td>Wastebasket</td> <td></td> </tr> </table>	<b><u>FINISHES:</u></b>	<b>Spec. Ref #</b>	Flooring:		ET, rubber, sheet vinyl, linoleum, polished concrete finishing, or colored concrete finishing	096500 096516 033510 033519	Base:		Resilient	096500	Ceiling:		Suspended acoustical	095113	Walls:		Painted concrete masonry units	042000/ 099100	<b><u>LOOSE FURNISHINGS:</u></b>		(12) Two-person work tables		(24) Students chairs/stools		(1) Teacher station & chair		Wastebasket		<p style="text-align: right;"><b>Spec. Ref.#</b></p> <p><b><u>FEATURES<sup>1</sup>:</u></b>  <b><u>Fixed Items:</u></b>  <b>24' of chalk/marker board, tack board, or tackable wall surface</b> 101100  30' of sink base cabinets w/2 sinks 123550  30' of wall cabinets 123550  Pencil sharpener support (<i>optional</i>) 062000  Windows with integral blinds 085113  Projection screen, 6'x8' 115213  (2) Paper towel dispensers 102813</p> <p><b><u>Fire Suppression:</u></b>  Fire suppression system 211000</p> <p><b><u>Plumbing:</u></b>  Plumbing connections  221116/221119/224000</p> <p><b><u>HVAC:</u></b>  Supply/return air system Div. 23  Independent temperature control 230923</p> <p><b><u>Electrical:</u></b>  Fluorescent lighting 265100  Illumination level: See Table 8600-4  Multilevel switching 262726  6 duplex receptacles 262726  Double duplex receptacle adjacent to each data and video port 262726</p> <p><b><u>Communications:</u></b>  1 video port 271533/271543  1 voice port and phone 271513/<b>273123</b>  1 data port near teacher workstation 271513  8 data ports 271513  Clock 275313  Central sound system 275123  Sound reinforcement system 275127  Overhead projector 274119</p> <p><b><u>Electronic Safety and Security:</u></b>  Life safety devices per code 283111</p> <p><b><u>Miscellaneous:</u></b>  <b>Pencil sharpener (<i>optional</i>)</b></p>
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**NOTES:**

1. Finishes/Features: Refer to Chapter 9 for specification references.

**07.0103 DENTAL LABORATORY TECHNOLOGY**

CHAPTER 6: CAREER-TECHNICAL SCHOOL

**CT-P2-1**

<b><u>PROGRAM DESCRIPTION:</u></b>		<b>FEATURES<sup>1</sup>:</b>	Spec.
Utilizing business and industry technical standards, math, science, ELA, social studies and technology within a business process framework. Introduces subject matter and experiences in producing restorative appliances authorized by a dentist.		<b>Fixed Items:</b>	<b>Ref.#</b>
<b>Program Type:</b>	2	<b>24' of chalk/marker board, tack board, or tackable wall surface</b>	101100
<b>Size Requirements:</b>	1,500 SF Lab	40' of sink base cabinets with 6 sinks and natural gas	123550
<b>Lab Requirements:</b>		40' of wall cabinets	123550
<b>FINISHES:</b>		(6) Paper towel dispensers	102813
<b>Flooring:</b>		Pencil sharpener support ( <i>optional</i> )	062000
ET, rubber, linoleum, sheet vinyl, polished concrete finishing, or colored concrete finishing	Spec. Ref #	Windows with integral blinds	085113
		Projection screen, 6'x8'	115213
<b>Base:</b>		<b>Fire Suppression:</b>	
Resilient	096500	Fire suppression system	211000
<b>Ceiling:</b>		<b>Plumbing:</b>	
Suspended acoustical	095113	Plumbing connections	221116/221119/224000
<b>Walls:</b>		Safety shower/eyewash connections	224000
Painted concrete masonry units	042000/ 099100	Master shut-off for gas	226313
		Gas connections	226313
<b>LOOSE FURNISHINGS:</b>		<b>HVAC:</b>	
(24) Student stools/chairs		Supply/return air system	Div. 23
(1) Teacher chair or stool		Independent temperature control	230923
(6) 4-person work tables with epoxy tops with gas and electric		Grinding machine ventilation	Div. 23
Wastebasket		Localized ventilation for specific lab-produced fumes	Div. 23
		<b>Electrical:</b>	
		Fluorescent lighting, parabolic lenses:	265100
		Illumination level: See Table 8600-5	
		Multilevel switching	262726
		30 duplex receptacles (minimum)	262726
		Double duplex receptacle adjacent to each data and video port	262726
		<b>Communications:</b>	
		1 video port	271533/271543
		1 voice port and phone	271513/ <b>273123</b>
		8 data ports	271513
		Clock	275313
		Central sound system	275123
		Sound reinforcement system	275127
		Overhead projector	274119
		<b>Electronic Safety and Security:</b>	
		Life safety devices per code	283111
		<b>Miscellaneous:</b>	
		<b>Pencil sharpener (optional)</b>	

**NOTES:**

1. Finishes/Features: Refer to Chapter 9 for specification references.

**17.2811 EMERGENCY MEDICAL TECHNICIAN  
CT-P2-1**

CHAPTER 6: CAREER-TECHNICAL SCHOOL

<p><b><u>PROGRAM DESCRIPTION:</u></b> Utilizing business and industry, math, science, and technology standards, instructs to the level of EMT-Basic. This course must include the Ohio Department of Public Safety approved EMT-Basic curriculum and be provided through an accredited ODPS provider. This course is a minimum of 450 hours with the ODPS curriculum limited to the senior level.</p> <p><b>Program Type:</b> 2</p> <p><b>Size Requirements:</b> 1,500 SF Lab</p> <p><b>Lab Requirements:</b></p> <table border="0"> <tr> <td><b><u>FINISHES:</u></b></td> <td style="text-align: right;">Spec. 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Ref.#</p> <p><b><u>FEATURES<sup>1</sup>:</u></b></p> <p><b><u>Fixed Items:</u></b></p> <table border="0"> <tr> <td><b>24' of chalk/marker board, tack board, or tackable wall surface</b></td> <td style="text-align: right;">101100</td> </tr> <tr> <td>30' of sink base cabinets w/2 sinks</td> <td style="text-align: right;">123550</td> </tr> <tr> <td>30' of wall cabinets</td> <td style="text-align: right;">123550</td> </tr> <tr> <td>Pencil sharpener support (<i>optional</i>)</td> <td style="text-align: right;">062000</td> </tr> <tr> <td>Windows with integral blinds</td> <td style="text-align: right;">085113</td> </tr> <tr> <td>Projection screen, 6'x8'</td> <td style="text-align: right;">115213</td> </tr> <tr> <td>(2) Paper towel dispensers</td> <td style="text-align: right;">102813</td> </tr> </table> <p><b><u>Fire Suppression:</u></b></p> <table border="0"> <tr> <td>Fire suppression system</td> <td style="text-align: right;">211000</td> </tr> </table> <p><b><u>Plumbing:</u></b></p> <table border="0"> <tr> <td>Plumbing connections</td> <td style="text-align: right;">221116/221119/224000</td> </tr> </table> <p><b><u>HVAC:</u></b></p> <table border="0"> <tr> <td>Supply/return air system</td> <td style="text-align: right;">Div. 23</td> </tr> <tr> <td>Independent temperature control</td> <td style="text-align: right;">230923</td> </tr> </table> <p><b><u>Electrical:</u></b></p> <table border="0"> <tr> <td>Fluorescent lighting</td> <td style="text-align: right;">265100</td> </tr> <tr> <td>    Illumination level: See Table 8600-5</td> <td></td> </tr> <tr> <td>Multilevel switching</td> <td style="text-align: right;">262726</td> </tr> <tr> <td>6 duplex receptacles</td> <td style="text-align: right;">262726</td> </tr> <tr> <td>Double duplex receptacle adjacent to each data and video port</td> <td style="text-align: right;">262726</td> </tr> </table> <p><b><u>Communications:</u></b></p> <table border="0"> <tr> <td>1 video port</td> <td style="text-align: right;">271533/271543</td> </tr> <tr> <td>1 voice port and phone</td> <td style="text-align: right;">271513/<b>273123</b></td> </tr> <tr> <td>1 data port near teacher workstation</td> <td style="text-align: right;">271513</td> </tr> <tr> <td>8 data ports</td> <td style="text-align: right;">271513</td> </tr> <tr> <td>Clock</td> <td style="text-align: right;">275313</td> </tr> <tr> <td>Central sound system</td> <td style="text-align: right;">275123</td> </tr> <tr> <td>Sound reinforcement system</td> <td style="text-align: right;">275127</td> </tr> <tr> <td>Overhead projector</td> <td style="text-align: right;">274119</td> </tr> </table> <p><b><u>Electronic Safety and Security:</u></b></p> <table border="0"> <tr> <td>Life safety devices per code</td> <td style="text-align: right;">283111</td> </tr> </table> <p><b><u>Miscellaneous:</u></b></p> <p><b><i>Pencil sharpener (optional)</i></b></p>	<b>24' of chalk/marker board, tack board, or tackable wall surface</b>	101100	30' of sink base cabinets w/2 sinks	123550	30' of wall cabinets	123550	Pencil sharpener support ( <i>optional</i> )	062000	Windows with integral blinds	085113	Projection screen, 6'x8'	115213	(2) Paper towel dispensers	102813	Fire suppression system	211000	Plumbing connections	221116/221119/224000	Supply/return air system	Div. 23	Independent temperature control	230923	Fluorescent lighting	265100	Illumination level: See Table 8600-5		Multilevel switching	262726	6 duplex receptacles	262726	Double duplex receptacle adjacent to each data and video port	262726	1 video port	271533/271543	1 voice port and phone	271513/ <b>273123</b>	1 data port near teacher workstation	271513	8 data ports	271513	Clock	275313	Central sound system	275123	Sound reinforcement system	275127	Overhead projector	274119	Life safety devices per code	283111
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**NOTES:**

1. Finishes/Features: Refer to Chapter 9 for specification references.

**07.0410 EXERCISE SCIENCE/SPORTS & RECREATION HEALTH CARE**

CHAPTER 6: CAREER-TECHNICAL SCHOOL

**CT-P2-1**

<b><u>PROGRAM DESCRIPTION:</u></b>	<b><u>FEATURES<sup>1</sup>:</u></b>	Spec.
Utilizing business and industry technical standards and math, science, ELA, and technology framework in the study of organ systems, study of movement & associated functional response and adaptations, understanding scientific basis underlying exercise-induced physiological responses in athletic training, biomechanics, exercise physiology and nutrition for the prevention, diagnosis, and treatment of injuries.	<b><u>Fixed Items:</u></b>	<b><u>Ref.#</u></b>
<b>Program Type:</b> 2	<b><i>24' of chalk/marker board, tack board, or tackable wall surface</i></b> 101100 30' of sink base cabinets w/2 sinks 123550 30' of wall cabinets 123550 Pencil sharpener support ( <i>optional</i> ) 062000 Windows with integral blinds 085113 Projection screen, 6'x8' 115213 (2) Paper towel dispensers 102813	
<b>Size Requirements:</b> 1,500 SF Lab	<b><u>Fire Suppression:</u></b> Fire suppression system 211000	
<b>Lab Requirements:</b>	<b><u>Plumbing:</u></b> Plumbing connections 221116/221119/224000	
<b><u>FINISHES:</u></b>	<b><u>HVAC:</u></b> Supply/return air system Div. 23 Independent temperature control 230923	Spec. <b><u>Ref #</u></b>
<b><u>Flooring:</u></b> ET, rubber, sheet vinyl, linoleum, 096500 polished concrete finishing, 096516 or colored concrete finishing 033510 Optional: carpet 033519 096816	<b><u>Electrical:</u></b> Fluorescent lighting 265100 Illumination level: See Table 8600-5 Multilevel switching 262726 6 duplex receptacles 262726 Double duplex receptacle adjacent to each data and video port 262726	
<b><u>Base:</u></b> Resilient 096500	<b><u>Communications:</u></b> 1 video port 271533/271543 1 voice port and phone 271513/ <b>273123</b> 1 data port near teacher workstation 271513 8 data ports 271513 Clock 275313 Central sound system 275123 Sound reinforcement system 275127 Overhead projector 274119	
<b><u>Ceiling:</u></b> Suspended acoustical 095113	<b><u>Electronic Safety and Security:</u></b> Life safety devices per code 283111	
<b><u>Walls:</u></b> Painted concrete masonry units 042000/ 099100	<b><u>Miscellaneous:</u></b> <b><i>Pencil sharpener (optional)</i></b>	
<b><u>LOOSE FURNISHINGS:</u></b> (10) Training tables (24) Students chairs/stools (1) Teacher station & chair Wastebasket		

**NOTES:**

1. Finishes/Features: Refer to Chapter 9 for specification references.

**07.4840 HEALTH SUPPORT PATHWAY  
07.4830 THERAPEUTIC PATHWAY  
CT-P2-1**

CHAPTER 6: CAREER-TECHNICAL SCHOOL

<p><b><u>PROGRAM DESCRIPTION:</u></b>  <u>HSP:</u> Utilizing business and industry technical standards, math, science, ELA, social studies and technology within a business process framework. Instruction includes concepts, subject matter, and experiences for health support services careers, including operation, resource management, and esthetics and aseptic procedures of the physical plant to ensure a healthy and well-equipped environment in healthcare.  <u>TP:</u> A clustered program utilizing business and industry technical standards, math, science, ELA, social studies and technology within a business process framework. Instruction includes concepts, subject matter and experiences in health careers that focus on care and treatment of individuals for the promotion and maintenance of wellness; and the prevention and treatment of physical, mental, and emotional disorders.</p> <p><b>Program Type:</b> 2</p> <p><b>Size Requirements:</b> 1,500 SF Lab</p> <p><b>Lab Requirements:</b></p> <table border="0"> <tr> <td><b><u>FINISHES:</u></b></td> <td style="text-align: right;">Spec. <u>Ref #</u></td> </tr> <tr> <td>Flooring:</td> <td></td> </tr> <tr> <td>ET, rubber, sheet vinyl, linoleum</td> <td style="text-align: right;">096500</td> </tr> <tr> <td>polished concrete finishing,</td> <td style="text-align: right;">096516</td> </tr> <tr> <td>or colored concrete finishing</td> <td style="text-align: right;">033510 033519</td> </tr> <tr> <td>Base:</td> <td></td> </tr> <tr> <td>Resilient</td> <td style="text-align: right;">096500</td> </tr> <tr> <td>Ceiling:</td> <td></td> </tr> <tr> <td>Suspended acoustical</td> <td style="text-align: right;">095113</td> </tr> <tr> <td>Walls:</td> <td></td> </tr> <tr> <td>Painted concrete masonry units</td> <td style="text-align: right;">042000/ 099100</td> </tr> </table>	<b><u>FINISHES:</u></b>	Spec. <u>Ref #</u>	Flooring:		ET, rubber, sheet vinyl, linoleum	096500	polished concrete finishing,	096516	or colored concrete finishing	033510 033519	Base:		Resilient	096500	Ceiling:		Suspended acoustical	095113	Walls:		Painted concrete masonry units	042000/ 099100	<table border="0"> <tr> <td><b><u>FEATURES<sup>1</sup>:</u></b></td> <td style="text-align: right;">Spec. <u>Ref.#</u></td> </tr> <tr> <td><b><u>Fixed Items:</u></b></td> <td></td> </tr> <tr> <td>24' of chalk/marker board, tack board, or tackable wall surface</td> <td style="text-align: right;">101100</td> </tr> <tr> <td>30' of sink base cabinets w/2 sinks</td> <td style="text-align: right;">123550</td> </tr> <tr> <td>30' of wall cabinets</td> <td style="text-align: right;">123550</td> </tr> <tr> <td>Pencil sharpener support (<i>optional</i>)</td> <td style="text-align: right;">062000</td> </tr> <tr> <td>Windows with integral blinds</td> <td style="text-align: right;">085113</td> </tr> <tr> <td>Projection screen, 6'x8'</td> <td style="text-align: right;">115213</td> </tr> <tr> <td>(2) Paper towel dispensers</td> <td style="text-align: right;">102813</td> </tr> <tr> <td><b><u>Fire Suppression:</u></b></td> <td></td> </tr> <tr> <td>Fire suppression system</td> <td style="text-align: right;">211000</td> </tr> <tr> <td><b><u>Plumbing:</u></b></td> <td></td> </tr> <tr> <td>Plumbing connections</td> <td style="text-align: right;">221116/221119/224000</td> </tr> <tr> <td><b><u>HVAC:</u></b></td> <td></td> </tr> <tr> <td>Supply/return air system</td> <td style="text-align: right;">Div. 23</td> </tr> <tr> <td>Independent temperature control</td> <td style="text-align: right;">230923</td> </tr> <tr> <td><b><u>Electrical:</u></b></td> <td></td> </tr> <tr> <td>Fluorescent lighting</td> <td style="text-align: right;">265100</td> </tr> <tr> <td>illumination level: See Table 8600-5</td> <td></td> </tr> <tr> <td>Multilevel switching</td> <td style="text-align: right;">262726</td> </tr> <tr> <td>6 duplex receptacles</td> <td style="text-align: right;">262726</td> </tr> <tr> <td>Double duplex receptacle adjacent to each data and video port</td> <td style="text-align: right;">262726</td> </tr> <tr> <td><b><u>Communications:</u></b></td> <td></td> </tr> <tr> <td>1 video port</td> <td style="text-align: right;">271533/271543</td> </tr> <tr> <td>1 voice port and phone</td> <td style="text-align: right;">271513/<b>273123</b></td> </tr> <tr> <td>1 data port near teacher workstation</td> <td style="text-align: right;">271513</td> </tr> <tr> <td>8 data ports</td> <td style="text-align: right;">271513</td> </tr> <tr> <td>Clock</td> <td style="text-align: right;">275313</td> </tr> <tr> <td>Central sound system</td> <td style="text-align: right;">275123</td> </tr> <tr> <td>Sound reinforcement system</td> <td style="text-align: right;">275127</td> </tr> <tr> <td>Overhead projector</td> <td style="text-align: right;">274119</td> </tr> <tr> <td><b><u>Electronic Safety and Security:</u></b></td> <td></td> </tr> <tr> <td>Life safety devices per code</td> <td style="text-align: right;">283111</td> </tr> <tr> <td><b><u>Miscellaneous:</u></b></td> <td></td> </tr> <tr> <td><b><i>Pencil sharpener (optional)</i></b></td> <td></td> </tr> <tr> <td><b><u>LOOSE FURNISHINGS:</u></b></td> <td></td> </tr> <tr> <td>(12) Two-person work tables</td> <td></td> </tr> <tr> <td>(24) Students chairs/stools</td> <td></td> </tr> <tr> <td>(1) Teacher station &amp; 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**NOTES:**

1. Finishes/Features: Refer to Chapter 9 for specification references.

**07.4890 HEALTH INFORMATION MANAGEMENT SERVICES  
07.0913 HEALTH UNIT COORDINATOR**

CHAPTER 6: CAREER-TECHNICAL SCHOOL

**CT-P2-1**

**PROGRAM DESCRIPTION:**

**HIMS:** A clustered program utilizing business and industry technical standards, math, science, ELA, social studies, and technology within a business process framework. Introduces concepts, subject matter, and experiences for health careers that focus on compilation, maintenance and retrieval of records, and reports and statistical data on health services.

**HUC:** Utilizing business and industry technical standards, math, science, ELA, social studies, and technology within a business process framework. Introduces concepts, subject matter, and experiences to manage components of non-patient care activities in health care facilities.

**Program Type:** 2

**Size Requirements:** 1,500 SF Lab

**Lab Requirements:**

**FINISHES:**

	Spec. Ref #
Flooring:	
ET, rubber, linoleum, sheet vinyl, polished concrete finishing, or colored concrete finishing	096500 096516 033510 033519
Base:	
Resilient	096500
Ceiling:	
Suspended acoustical	095113
Walls:	
Painted concrete masonry units	042000/ 099100

**LOOSE FURNISHINGS:**

L1 (24) Student stools/chairs	
L2 (1) Teacher chair or stool	
L3 (4) Computer workstations	
L4 (12) 2-person work tables with epoxy tops with gas and electric Wastebasket	

**FEATURES<sup>1</sup>:**

**Fixed Items:**

	Spec. Ref.#
F1 <b>24' of chalk/marker board, tack board, or tackable wall surface</b>	101100
F2 <b>Reserved</b>	
F3 Demonstration table/teacher desk	123550
F4 60' of perimeter sink base cabinets with 5 sinks	123550
F5 30' of wall cabinets	123550
F6 (5) Paper towel dispensers	102813
F7 Safety shower/eyewash	224000
F8 Pencil sharpener support ( <b>optional</b> )	062000
F9 Windows with integral blinds	085113
F10 Undercounter refrigerator	113100
F11 Projection screen, 6'x8'	115213

**Fire Suppression:**

Fire suppression system 211000

**Plumbing:**

Plumbing connections  
221116/221119/224000  
Safety shower/eyewash connections 224000  
Master shut-off for gas 226313  
Gas connections 226313

**HVAC:**

Supply/return air system Div. 23  
Independent temperature control 230923  
Manual exhaust Div. 23

**Electrical:**

Fluorescent lighting, parabolic lenses:265100  
Illumination level: See Table 8600-5  
Multilevel switching 262726  
6 duplex receptacles (minimum) 262726  
Double duplex receptacle adjacent to  
each data and video port 262726  
Means of egress lighting per code 265100

**Communications:**

T1 1 video port	271533/271543
T2 1 voice port and phone	271513/ <b>273123</b>
T3 1 data port at demonstration table	271513
T4 11 data ports for <b>classroom technology</b>	271513
Clock	275313
Central sound system	275123
Sound reinforcement system	275127
T5 Overhead projector	274119

**Electronic Safety and Security:**

Life safety devices per code 283111

**Miscellaneous: Pencil sharpener (optional)**

**NOTES:**

1. Finishes/Features: Refer to Chapter 9 for specification references.

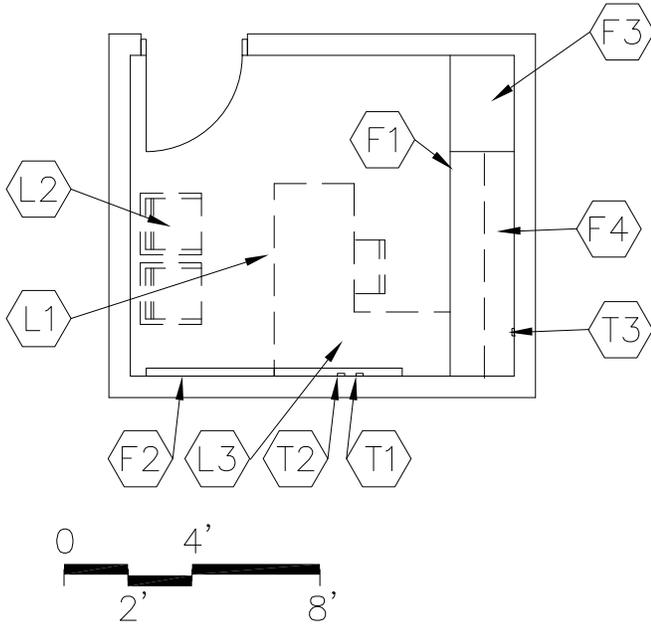
**07.0302 PRACTICAL NURSING  
CT-P2-1**

CHAPTER 6: CAREER-TECHNICAL SCHOOL

<p><b><u>PROGRAM DESCRIPTION:</u></b> A combination of subject matter and supervised clinical experiences designed to prepare a person to give direct nursing care under the supervision of a registered nurse, licensed physician, or dentist. Instruction includes safety and infection control, first-aid and CPR, legal and ethical responsibilities, coordinated care, goal-oriented care, environmental safety, treatments and procedures, physiological adaptation, mobility, comfort, basic care, psychosocial adaptation, growth and development, prevention and early treatment of disease, and reduction of risk potential.</p> <p><b>Program Type:</b> 2</p> <p><b>Size Requirements:</b> 1,500 SF Lab</p> <p><b>Lab Requirements:</b></p> <table border="0"> <thead> <tr> <th></th> <th style="text-align: right;">Spec. Ref #</th> </tr> </thead> <tbody> <tr> <td colspan="2"><b><u>FINISHES:</u></b></td> </tr> <tr> <td colspan="2">Flooring:</td> </tr> <tr> <td>ET, rubber,</td> <td style="text-align: right;">096500</td> </tr> <tr> <td>sheet vinyl, or linoleum</td> <td style="text-align: right;">096516</td> </tr> <tr> <td colspan="2">Base:</td> </tr> <tr> <td>Resilient</td> <td style="text-align: right;">096500</td> </tr> <tr> <td colspan="2">Ceiling:</td> </tr> <tr> <td>Suspended acoustical</td> <td style="text-align: right;">095113</td> </tr> <tr> <td colspan="2">Walls:</td> </tr> <tr> <td>Painted concrete masonry units</td> <td style="text-align: right;">042000/ 099100</td> </tr> <tr> <td colspan="2"><b><u>LOOSE FURNISHINGS:</u></b></td> </tr> <tr> <td>(12) Two-person work tables</td> <td></td> </tr> <tr> <td>(24) Students chairs/stools</td> <td></td> </tr> <tr> <td>(1) Teacher station &amp; chair</td> <td></td> </tr> <tr> <td>Wastebasket</td> <td></td> </tr> </tbody> </table>		Spec. Ref #	<b><u>FINISHES:</u></b>		Flooring:		ET, rubber,	096500	sheet vinyl, or linoleum	096516	Base:		Resilient	096500	Ceiling:		Suspended acoustical	095113	Walls:		Painted concrete masonry units	042000/ 099100	<b><u>LOOSE FURNISHINGS:</u></b>		(12) Two-person work tables		(24) Students chairs/stools		(1) Teacher station & chair		Wastebasket		<p style="text-align: right;">Spec. Ref.#</p> <p><b><u>FEATURES<sup>1</sup>:</u></b></p> <p><b><u>Fixed Items:</u></b></p> <p><b>24' of chalk/marker board, tack board, or tackable wall surface</b> 101100</p> <p>30' of sink base cabinets w/2 sinks 123550</p> <p>30' of wall cabinets 123550</p> <p>Pencil sharpener support (<i>optional</i>) 062000</p> <p>Windows with integral blinds 085113</p> <p>Projection screen, 6'x8' 115213</p> <p>(2) Paper towel dispensers 102813</p> <p><b><u>Fire Suppression:</u></b></p> <p>Fire suppression system 211000</p> <p><b><u>Plumbing:</u></b></p> <p>Plumbing connections 221116/221119/224000</p> <p><b><u>HVAC:</u></b></p> <p>Supply/return air system Div. 23</p> <p>Independent temperature control 230923</p> <p><b><u>Electrical:</u></b></p> <p>Fluorescent lighting 265100</p> <p>Illumination level: See Table 8600-5</p> <p>Multilevel switching 262726</p> <p>6 duplex receptacles 262726</p> <p>Double duplex receptacle adjacent to each data and video port 262726</p> <p><b><u>Communications:</u></b></p> <p>1 video port 271533/271543</p> <p>1 voice port and phone 271513/<b>273123</b></p> <p>1 data port near teacher workstation 271513</p> <p>8 data ports 271513</p> <p>Clock 275313</p> <p>Central sound system 275123</p> <p>Sound reinforcement system 275127</p> <p>Overhead projector 274119</p> <p><b><u>Electronic Safety and Security:</u></b></p> <p>Life safety devices per code 283111</p> <p><b><u>Miscellaneous:</u></b></p> <p><b>Pencil sharpener (<i>optional</i>)</b></p>
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**NOTES:**

1. Finishes/Features: Refer to Chapter 9 for specification references.
2. Based on curriculum needs, a training restroom and laundry room may be included with this program in the allotted square footage for the lab. Space plates for training restroom and laundry room can be found on pages 6314-41 and 6314-42 – Patient Care Technician.



**PROGRAM ACTIVITIES:**

- Private space for program instructor
- One-on-one conferences with academic instructors, students, etc.

**SPATIAL RELATIONSHIPS:**

- Near related lab
- Direct access to school circulation areas

**ENVIRONMENTAL CONSIDERATIONS:**

- Environmental sound control -  
wall minimum STC 45  
ceiling minimum CAC 35, NRC 0.70

CAPACITY: 1 - 3 persons  
SIZE: 120 SF

**NOTES:**

1. Loose furnishings shown represent one of many possible arrangements.

**OFFICE  
CT-P2-2**

## CHAPTER 6: CAREER-TECHNICAL SCHOOL

<u>FINISHES<sup>1</sup>:</u>	Spec. Ref.#	<u>FEATURES<sup>1</sup>:</u>	Spec. Ref.#
Flooring:		<u>Fixed Items:</u>	
Carpet or carpet tile	096816	F1 Work surface with file drawers	123550
	096813	F2 4' of tack board	101100
		or tackable wall surface	
Base:		F3 Tall wardrobe	123550
Resilient base	096500	F4 Wall cabinets above work surface	123550
Ceiling:		<u>Fire Suppression:</u>	
Suspended, acoustical	095113	Fire suppression system	211000
Walls:		<u>Plumbing:</u>	
Painted gypsum wallboard		N/A	
over metal studs	092116/099100		
<u>LOOSE FURNISHINGS:</u>		<u>HVAC:</u>	
L1 Desk and chair		Supply/return air system	Div. 23
L2 Visitor chairs		Independent temperature control	230923
L3 Computer desk return			
Wastebasket		<u>Electrical:</u>	
		Single level switching	262726
		Fluorescent lighting	265100
		Illumination level: See Table 8600-5	
		4 duplex receptacles	262726
		Double duplex receptacle adjacent	
		to data and video port	262726
		<u>Communications:</u>	
		T1 1 voice port and phone	271513/ <b>273123</b>
		T2 1 data port near workstation	271513
		T3 1 video port	271533/271543
		Central sound system	275123
		Clock	275313
		<u>Electronic Safety and Security:</u>	
		Life safety devices per code	283111
		<u>Miscellaneous:</u>	
		N/A	

NOTES:

1. Finishes/Features: Refer to Chapter 9 for specification references. Optional: moveable cabinets
2. Fixed casework and loose furnishings can also be all fixed casework or all loose furnishings.

**PROGRAM ACTIVITIES:**

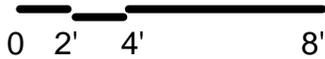
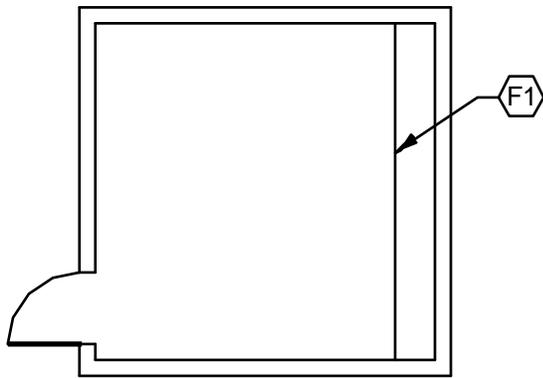
- Space for storage of lab equipment

**SPATIAL RELATIONSHIPS:**

- Near related lab

**ENVIRONMENTAL CONSIDERATIONS:**

N/A



CAPACITY:  
SIZE:

N/A  
200 SF

NOTES:

**STORAGE AREA  
CT-P2-3**
**CHAPTER 6: CAREER-TECHNICAL SCHOOL**

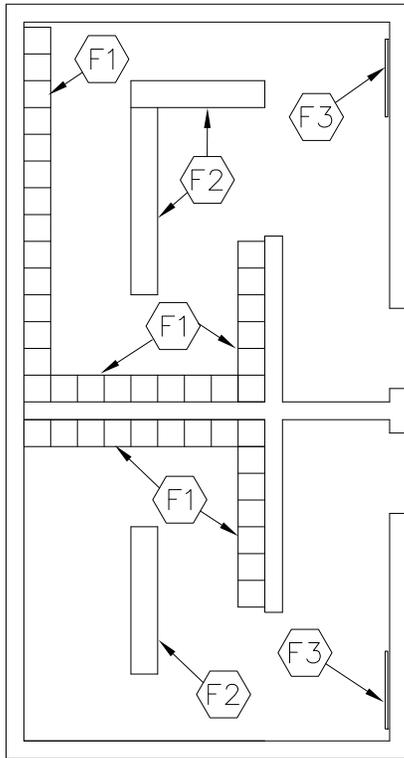
	Spec. Ref.#		Spec. Ref.#
<u>FINISHES<sup>1</sup>:</u>		<u>FEATURES<sup>1</sup>:</u>	
Flooring:		<u>Fixed Items<sup>1</sup>:</u>	
<b>Sealed</b> concrete	033000	F1 8'-20' of open shelving	
		Depth may vary (fixed or loose)	123550
Base:		<u>Fire Suppression:</u>	
Resilient base	096500	Fire suppression system	211000
Ceiling:		<u>Plumbing:</u>	
Exposed structure	---	N/A	
Walls:		<u>HVAC:</u>	
Painted concrete masonry units	042000/099100	To be determined by Design Professional	
		Supplemental heat as required	Div. 23
<u>LOOSE FURNISHINGS:</u>		<u>Electrical:</u>	
N/A		Single level switching	262726
		Fluorescent lighting	265100
		Illumination level: See Table 8600-5	
		Duplex receptacles	262726
		<u>Communications:</u>	
		N/A	
		<u>Electronic Safety and Security:</u>	
		Life safety devices per code	283111
		<u>Miscellaneous:</u>	
		N/A	

**NOTES:**

1. Finishes/Features: Refer to Chapter 9 for specification references.

**CHANGING ROOM  
CT-P2-4**

**CHAPTER 6: CAREER-TECHNICAL SCHOOL**



50 total lockers

**PROGRAM ACTIVITIES:**

- Personal and health needs for the program Specific users.
- Changing of clothes and/or uniforms.
- Storage of personal items while students are in lab.

**SPATIAL RELATIONSHIPS:**

- Adjacent to related lab

**ENVIRONMENTAL CONSIDERATIONS:**

- Sanitary and durable finishes.
- Environmental sound control  
Wall minimum STC 40  
Ceiling minimum CAC 35, NRC 0.70

CAPACITY:  
SIZE:

N/A  
450 SF

**NOTES:**

1. Large and small changing areas are interchangeable for either males or females. Determination based on male/female ratio within each program.

**CHANGING ROOM  
CT-P2-4**
**CHAPTER 6: CAREER-TECHNICAL SCHOOL**

<u>FINISHES<sup>1</sup>:</u>	Spec. Ref.#	<u>FEATURES<sup>1</sup>:</u>	Spec. Ref.#
<u>Flooring:</u>		<u>Fixed Items<sup>1</sup>:</u>	
Polished concrete finishing, or colored concrete finishing	033510 033519	F1 Student lockers	105113
Optional: linoleum or rubber	096500 096516	F2 Locker benches	062000
		F3 24" x 60" mirror	102813
<u>Base:</u>		<u>Fire Suppression:</u>	
Resilient base	096500	Fire suppression system	211000
<u>Ceiling:</u>		<u>Plumbing:</u>	
Suspended, acoustical with high impact hold down clips	095113	N/A	
<u>Walls:</u>		<u>HVAC:</u>	
Painted concrete masonry units	042000 / 099100	Supply/Return air system	Div. 23
		Exhaust air system	Div. 23
		Supplemental heat as required	Div. 23
		Individual temperature control	230923
<u>LOOSE FURNISHINGS</u>		<u>Electrical:</u>	
Wastebaskets		Single level switching	262726
		Fluorescent lighting	265100
		Illumination level: See Table 8600-6	
		2 Duplex receptacles	262726
		Means of egress lighting per code	265100
		<u>Communications:</u>	
		Clock	275313
		Central Sound System	275123
		<u>Electronic Safety and Security:</u>	
		Life safety devices per code	283111
		<u>Miscellaneous:</u>	
		N/A	

**NOTES:**

1. Finishes/Features: Refer to Chapter 9 for specification references.

TABLE OF CONTENTS

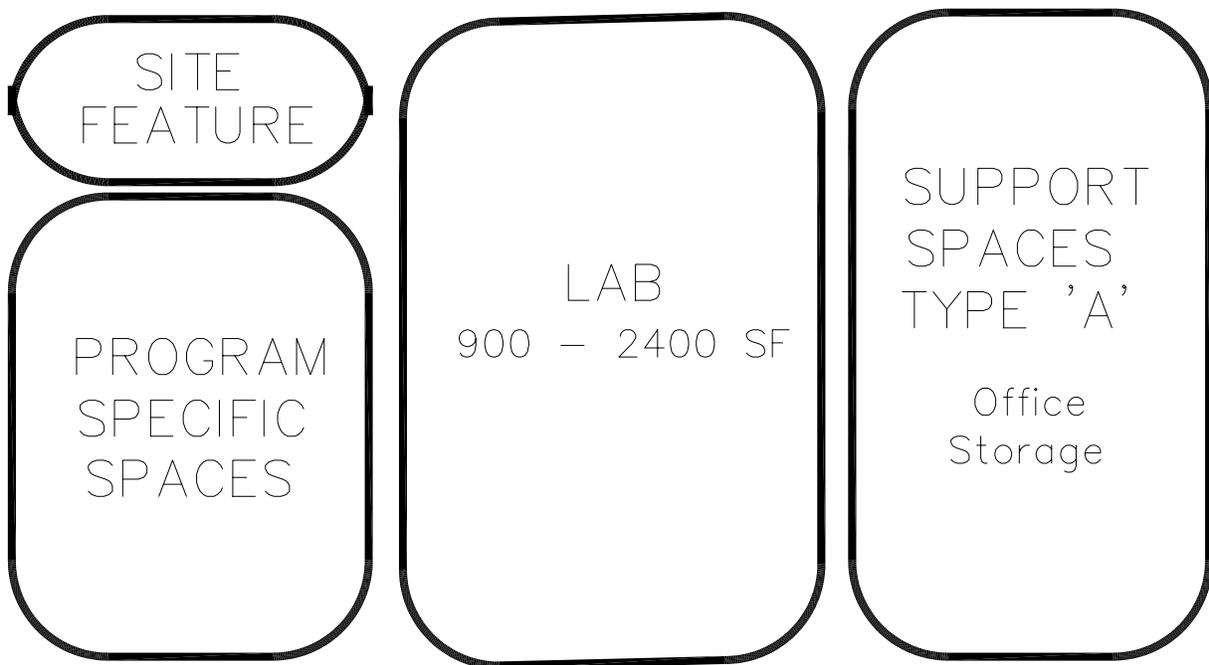
A.	General Description .....	6313-3
B.	Program Example .....	6313-4
C.	Lab Plate Example .....	6313-5
D.	Lab Descriptions	
	▶ <b>Acquisitions and Logistics</b> .....	6313-15
	▶ Early Childhood Education .....	6313-7
	Observation Room .....	6313-9
	Infants Room .....	6313-10
	Kitchen/Break Room .....	6313-11
	Work Room .....	6313-12
	Toddler Restroom .....	6313-13
	Reception .....	6313-14
	▶ Entrepreneurship .....	6313-15
	Bookstore .....	6313-16
	Display .....	6313-17
	▶ Ground Operations .....	6313-19
	Reference Room .....	6313-20
	▶ Lodging .....	6313-21
	Banquet Room .....	6313-22
	▶ Marketing Communications .....	6313-15
	Bookstore .....	6313-16
	Display .....	6313-17
	▶ Marketing Management .....	6313-15
	Bookstore .....	6313-16
	Display .....	6313-17
E.	Office Plate .....	6313-23
F.	Storage Area Plate .....	6313-25

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**Program Type 3**

Description: Small to medium sized lab space with typical support space. Additionally, this program requires specialized auxiliary spaces and possible site features.

This program is to utilize standard construction and be one-story (16' +/- tall) tall. Lab, support, and specialty spaces to have finished floor, painted walls, and suspended acoustical ceiling.

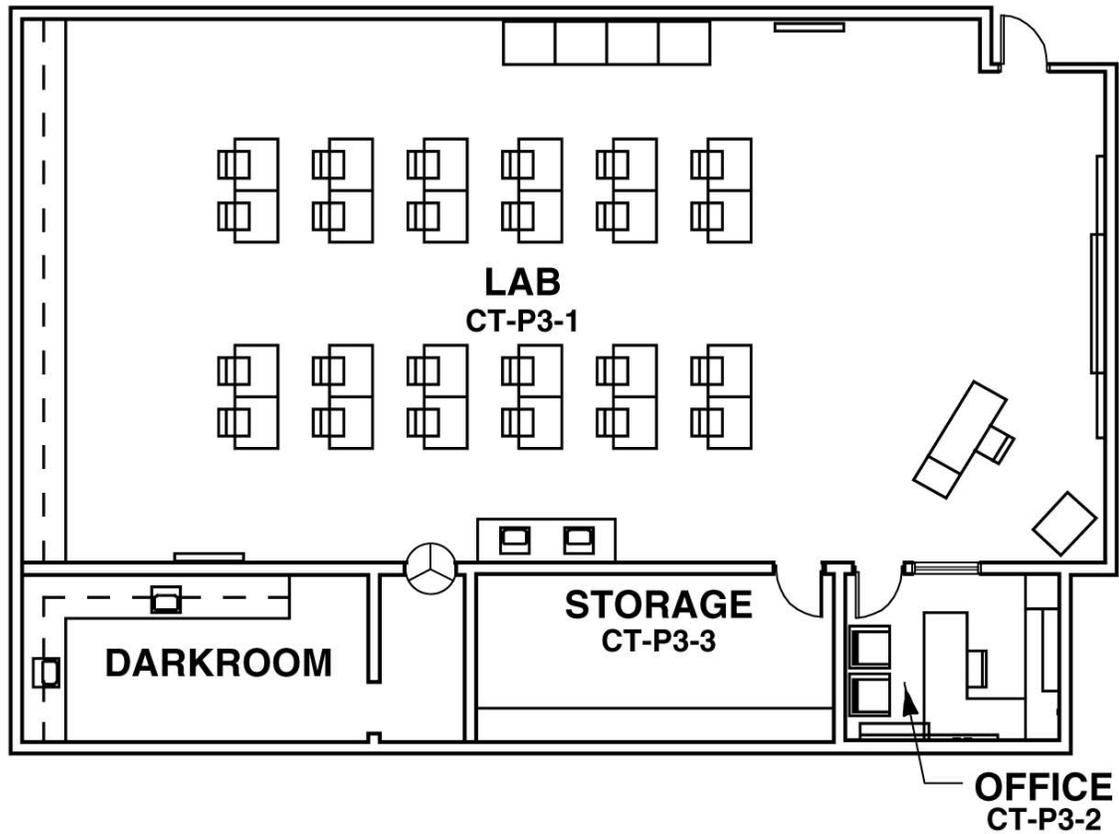
**NOTES:**

This is an example of how the Program Type 3 spaces in a career-technical school could be arranged. This is meant only to demonstrate the relationships between various spaces of this area.

Following are the Program Type 3 space plates:

- CT-P3-1 Lab
- CT-P3-2 Office
- CT-P3-3 Storage

**PROGRAM TYPE 3  
EXAMPLE**

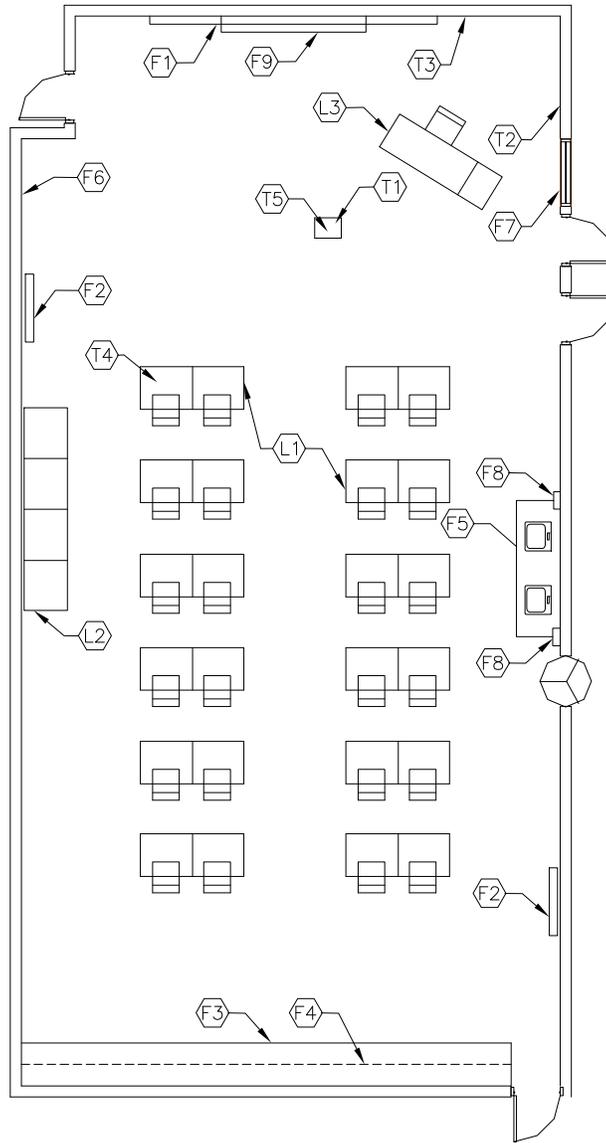


**Program Type 3**

This is an example to show the possible relationships of spaces for this program type.

**NOTES:**

1. See lab descriptions within this section for specific lab requirements, including program specific rooms.
2. See individual space plates at the end of this section for specific requirements for the storage room and office.



CAPACITY:	24 Students
SIZE:	900 – 2,400 SF
	(see lab summaries for exact sizes)
ANCILLARY SPACES:	CT-P3-2 and CT-P3-3

**NOTES:**

1. Loose furnishings shown represent one of many possible arrangements.
2. Graphic plate is an example only. Other labs within this program are not drawn – refer to lab summaries within this program type for information on a particular lab.

**LAB**  
**CT-P1-1**

CHAPTER 6: CAREER-TECHNICAL SCHOOL

PROGRAM ACTIVITIES:

- Large and small group instruction
- Group and individual work
- Demonstrations

SPATIAL RELATIONSHIPS:

- Near other related labs
- Adjacent to typical support spaces
- Proximity to large group restrooms
- Located away from noisy or public activities
- Proximity to core academic area and common use areas
- Flexibility of space

ENVIRONMENTAL CONSIDERATIONS:

- **Required: View glass – minimum 5% without daylighting design; minimum 3% with daylighting design.**  
**Recommended: Daylighting design with glazing area determined by design solution.**
- Environmental sound control -  
wall **only** minimum STC **45**  
ceiling minimum CAC 35, NRC 0.70

NOTES:

1. Finishes/Features: Refer to Chapter 9 for specification references.
2. Loose Furnishings: Refer to Lab Profiles within this section.
3. Loose Furnishings, fixed equipment, utility locations, and general footprint of room shown represent one of many possible arrangements.

**35.0201 EARLY CHILDHOOD EDUCATION  
CT-P3-1**

## CHAPTER 6: CAREER-TECHNICAL SCHOOL

<u>PROGRAM DESCRIPTION:</u>		Spec. Ref.#
Preparation for employment in childcare services, child development, and early childhood education within the childcare and guidance industries.		
<b>Program Type:</b>	3	
<b>Size Requirements:</b>	1,500 SF Lab	
<b>Lab Requirements:</b>		
<u>FINISHES:</u>	Spec. Ref #	
Flooring:		
30% Carpet	096816	
70% ET, sheet vinyl, or linoleum	096500 096516	
Base:		
Resilient	096500	
Ceiling:		
Suspended acoustical	095113	
Walls:		
Painted concrete masonry units	042000/ 099100	
<u>LOOSE FURNISHINGS:</u>		
Wastebasket		
		101100
		123550
		123550
		123550
		123550
		062000
		085113
		102813
		115213
		211000
		221116/221119/224000
		224000
		Div. 23
		230923
		265100
		Illumination level: See Table 8600-5
		262726
		262726
		262726
		271533/271543
		271513/ <b>273123</b>
		271513
		275313
		275123
		275127
		274119
		283111
		<b>Pencil sharpener (optional)</b>

NOTES:

1. Finishes/Features: Refer to Chapter 9 for specification references.

**35.0201 EARLY CHILDHOOD EDUCATION**  
**CT-P3-1 CHAPTER 6: CAREER-TECHNICAL SCHOOL**

---

SITE FEATURES:

Playground Area

- Provide 60 SF per child served
- Follow applicable safety guidelines for different age groups.
- Plan for play activities that include rocking, swinging, balancing, climbing, and sliding.
- Locate equipment with moving parts, such as swings, at the perimeter of the play area. Use fence or planting beds to prevent children from inadvertently stepping into path of moving equipment.
- Surfacing is to be resilient and installed at a sufficient depth to meet current safety guidelines. It should be a non-splintering surface where children may be crawling. Avoid using black surfacing.
- Provide edging to keep loose soft surfacing within bounds of the play area. Depress soft surfacing material below edging. Provide underground drain system and geotextile below soft surfacing.
- Increase the depth of soft surface material in areas of high use such as the base of swings and slides.
- Possible play equipment includes the following: swing set, modular play structure, tot track, four square, and hop scotch.
- Protect entire play area with fencing.

**35.0201 EARLY CHILDHOOD EDUCATION  
Observation Room**

CHAPTER 6: CAREER-TECHNICAL SCHOOL

<b>Program Type:</b> 3	<b>FEATURES<sup>1</sup>:</b>	Spec.
<b>Size Requirements:</b> 120 SF	<u>Fixed Items:</u>	Ref.#
<b>Requirements:</b>	Interior window with one-way glass	081113/088000
<u>FINISHES:</u>	<u>Fire Suppression:</u>	211000
Flooring:	Fire suppression system	
Carpet	<u>Plumbing:</u>	
Option: Rubber	N/A	
Base:	<u>HVAC:</u>	
Resilient	Supply/return air system	Div. 23
Ceiling:	Independent temperature control	230923
Suspended acoustical	<u>Electrical:</u>	
Walls:	Fluorescent lighting	265100
Painted concrete masonry units	Illumination level: See Table 8600-5	
042000/ 099100	Single level switching	262726
<u>LOOSE FURNISHINGS:</u>	2 duplex receptacles	262726
5 stools	<u>Communications:</u>	
<u>ENVIRONMENTAL CONSIDERATIONS:</u>	Central sound system	275123
<ul style="list-style-type: none"> <li><b>Required: View glass – minimum 5% without daylighting design; minimum 3% with daylighting design.</b></li> </ul>	<u>Electronic Safety and Security:</u>	
<ul style="list-style-type: none"> <li><b>Recommended: Daylighting design with glazing area determined by design solution.</b></li> </ul>	Life safety devices per code	283111
<ul style="list-style-type: none"> <li>Environmental sound control - wall <b>only</b> minimum STC <b>45</b> ceiling minimum CAC 35, NRC 0.70</li> </ul>	<u>Miscellaneous:</u>	
	N/A	

NOTES:

1. Finishes/Features: Refer to Chapter 9 for specification references.

**35.0201 EARLY CHILDHOOD EDUCATION**  
**Infants Room**

## CHAPTER 6: CAREER-TECHNICAL SCHOOL

		Spec. Ref.#
<b>Program Type:</b>	3	
<b>Size Requirements:</b>	700 SF	
<b>Requirements:</b>		
<u>FINISHES:</u>	Spec. Ref #	
Flooring:		
Carpet	096816	
ET, sheet vinyl or linoleum at sink	096500 096516	
Base:		
Resilient	096500	
Ceiling:		
Suspended acoustical	095113	
Walls:		
Painted concrete masonry units	042000/ 099100	
<u>LOOSE FURNISHINGS:</u>		
Staff chair		
12' of bookcases		
3 playpens		
12 cribs		
2 rocking chairs		
Table 18"x24"x18"		
Stool		
File cabinet		
Wastebasket		
ENVIRONMENTAL CONSIDERATIONS:		
• <b>Required: View glass – minimum 5% without daylighting design; minimum 3% with daylighting design.</b>		
<b>Recommended: Daylighting design with glazing area determined by design solution.</b>		
• Environmental sound control - wall <b>only</b> minimum STC <b>45</b> ceiling minimum CAC 35, NRC 0.70		
		<b>FEATURES<sup>1</sup>:</b>
		<u>Fixed Items:</u>
		14' of base cabinets w/1 sink 123550
		4' of baby changing area 123550
		w/3" high edges and pad
		10' of wall cabinets 123550
		Interior window 088000/081113
		<b>28' of chalk/marker board, tack board, or</b>
		<b>tackable wall surface</b> 101100
		Paper towel dispenser 102813
		<u>Fire Suppression:</u>
		Fire suppression system 211000
		<u>Plumbing:</u>
		Plumbing connections 221116/221119/224000
		Baby washing sink 221116/221119/224000
		<u>HVAC:</u>
		Supply/return air system Div. 23
		Independent temperature control 230923
		<u>Electrical:</u>
		Fluorescent lighting 265100
		Illumination level: See Table 8600-5
		Multilevel switching 262726
		10 duplex receptacles 262726
		Double duplex receptacle adjacent to each data and video port 262726
		<u>Communications:</u>
		1 video port 271533/271543
		1 voice port and phone 271513/ <b>273123</b>
		1 data port 271513
		Clock 275313
		Central sound system 275123
		<u>Electronic Safety and Security:</u>
		Life safety devices per code 283111
		<u>Miscellaneous:</u>
		N/A

NOTES:

1. Finishes/Features: Refer to Chapter 9 for specification references.





**35.0201 EARLY CHILDHOOD EDUCATION  
Toddler Restroom**

CHAPTER 6: CAREER-TECHNICAL SCHOOL

<p><b>Program Type:</b> 3</p> <p><b>Size Requirements:</b> 60 SF</p> <p><b>Requirements:</b></p> <p><u>FINISHES:</u> Flooring: Rubber, linoleum, ET, or sheet vinyl Optional: ceramic mosaic tile, porcelain tile base, or resinous flooring</p> <p>Base: Resilient Optional ceramic mosaic tile base, porcelain tile base, or resinous flooring</p> <p>Ceiling: Suspended acoustical</p> <p>Walls: Painted concrete masonry units</p> <p><u>LOOSE FURNISHINGS:</u> Wastebasket</p> <p><u>ENVIRONMENTAL CONSIDERATIONS:</u></p> <ul style="list-style-type: none"> <li>▪ Wall minimum STC 48</li> <li>▪ Ceiling minimum CAC 35, NRC 0.70</li> </ul>	<p style="text-align: right;">Spec. <u>Ref.#</u></p> <p><u>FEATURES<sup>1</sup>:</u> <u>Fixed Items:</u> Paper towel dispenser Soap dispenser 36" and 42" grab bars 24"x60" mirror Toilet paper holder Baby changing station</p> <p><u>Fire Suppression:</u> Fire suppression system</p> <p><u>Plumbing:</u> Toddler height sink Toddler height toilet Plumbing connections</p> <p><u>HVAC:</u> Exhaust air system Supplemental heat as required</p> <p><u>Electrical:</u> Fluorescent lighting Illumination level: See Table 8600-5 Single level switching</p> <p><u>Communications:</u> Central sound system</p> <p><u>Electronic Safety and Security:</u> Life safety devices per code</p> <p><u>Miscellaneous:</u> N/A</p>
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NOTES:

1. Finishes/Features: Refer to Chapter 9 for specification references.



**04.4110 ENTREPRENEURSHIP  
04.0815 MARKETING COMMUNICATIONS  
04.0810 MARKETING MANAGEMENT  
04.1900 ACQUISITION AND LOGISTICS**

CHAPTER 6: CAREER-TECHNICAL SCHOOL

**CT-P3-1**

**PROGRAM DESCRIPTION:**

**E:** Preparation for starting new ventures that create, power, and change business activity – meaning new markets, new products, new production methods, and new businesses.

**MC:** Preparation for careers that inform, remind, and/or persuade a target audience including advertising, public relations, and multimedia marketing communications.

**MM:** Educational programs in marketing management prepare learners for careers requiring broad, cross-functional knowledge of marketing and management. These functions include supply-chain management, marketing-information management, pricing product/service management, marketing communications, and selling.

**A&L:** *Preparation for the strategic operation and management of marketing systems with emphasis on logistics components, including purchasing and warehousing.*

**Program Type:** 3

**Size Requirements:**

- 1,000 SF Lab – Entrepreneurship
- 1,000 SF Lab – Marketing Comm.
- 900 SF Lab – Marketing Management
- 900 SF Lab – Acquisition & Logistics**

**Lab Requirements:**

**FINISHES:**

**Flooring:**

- Carpet 096816
- Optional: ET, 096500
- sheet vinyl, or linoleum 096516

Base: Resilient 096500

Ceiling: Suspended acoustical 095113

**Walls:**

- Painted concrete masonry units 042000/  
099100

**FEATURES<sup>1</sup>:**

**Fixed Items:**

- 32' of chalk/marker board, tack board, or tackable wall surface** 101100
- 30' of wall cabinets 123550
- 30' of sink base cabinets w/1 sink 123550
- Pencil sharpener support (**optional**) 062000
- Windows with integral blinds 085113
- Paper towel dispenser 102813
- Projection screen, 6'x8' 115213

**Fire Suppression:**

- Fire suppression system 211000

**Plumbing:**

- Plumbing connections 221116/221119/224000

**HVAC:**

- Supply/return air system Div. 23
- Independent temperature control 230923

**Electrical:**

- Fluorescent lighting 265100
- Illumination level: See Table 8600-5
- Multilevel switching 262726
- 10 duplex receptacles (minimum) 262726
- Double duplex receptacle adjacent to each data and video port 262726

**Communications:**

- T1 1 video port 271533/271543
- T2 1 voice port and phone 271513/**273123**
- T3 1 data port near teacher workstation 271513
- T4 26 data ports 271513
- Clock 275313
- Central sound system 275123
- Sound reinforcement system 275127
- T5 Overhead projector 274119

**Electronic Safety and Security:**

- Life safety devices per code 283111

**Miscellaneous:**

**Pencil sharpener (optional)**

**LOOSE FURNISHINGS:**

- (24) Computer workstation furniture & chairs
- (1) Teacher station & chair
- Wastebasket

**NOTES:**

1. Finishes/Features: Refer to Chapter 9 for specification references.
2. **Acquisition and Logistics may be taught in high bay lab if curriculum supports.**

**04.4110 ENTREPRENEURSHIP**  
**04.0815 MARKETING COMMUNICATIONS**  
**04.0810 MARKETING MANAGEMENT**  
**Bookstore**

## CHAPTER 6: CAREER-TECHNICAL SCHOOL

<p><b>Program Type:</b> 3</p> <p><b>Size Requirements:</b> 800 SF</p> <p><b>Requirements:</b></p> <p><u>FINISHES:</u></p> <p>Flooring:</p> <p>Carpet 096816</p> <p>Optional: ET, 096500</p> <p>sheet vinyl, or linoleum 096516</p> <p>Base:</p> <p>Resilient 096500</p> <p>Ceiling:</p> <p>Suspended acoustical 095113</p> <p>Walls:</p> <p>Painted concrete masonry units 042000/ 099100</p> <p><u>LOOSE FURNISHINGS:</u></p> <p>Stool</p> <p>Wastebasket</p> <p><u>ENVIRONMENTAL CONSIDERATIONS:</u></p> <ul style="list-style-type: none"> <li>• <b>Required:</b> View glass – minimum 5% without daylighting design; minimum 3% with daylighting design. <b>Recommended:</b> Daylighting design with glazing area determined by design solution.</li> <li>• Environmental sound control - wall <b>only</b> minimum STC 45 ceiling minimum CAC 35, NRC 0.70</li> </ul>	<p style="text-align: right;">Spec. Ref.#</p> <p><u>FEATURES<sup>1</sup>:</u></p> <p><u>Fixed Items:</u></p> <p>8' of plastic laminate counter 062000</p> <p>75' of base cabinet 123550</p> <p>75' of adjustable display wall system 060565</p> <p>Interior window 088000/081113</p> <p><u>Fire Suppression:</u></p> <p>Fire suppression system 211000</p> <p><u>Plumbing:</u></p> <p>N/A</p> <p><u>HVAC:</u></p> <p>Supply/return air system Div. 23</p> <p>Independent temperature control 230923</p> <p><u>Electrical:</u></p> <p>Fluorescent lighting 265100</p> <p>Illumination level: See Table 8600-5</p> <p>Incandescent track lighting 265100</p> <p>Multilevel switching 262726</p> <p>6 duplex receptacles (minimum) 262726</p> <p>Double duplex receptacle adjacent to each data port 262726</p> <p><u>Communications:</u></p> <p>2 data ports 271513</p> <p>Clock 275313</p> <p>Central sound system 275123</p> <p><u>Electronic Safety and Security:</u></p> <p>Life safety devices per code 283111</p> <p><u>Miscellaneous:</u></p> <p>N/A</p>
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NOTES:

1. Finishes/Features: Refer to Chapter 9 for specification references.

**04.4110 ENTREPRENEURSHIP**  
**04.0815 MARKETING COMMUNICATIONS**  
**04.0810 MARKETING MANAGEMENT**

## CHAPTER 6: CAREER-TECHNICAL SCHOOL

**Display**

		Spec. Ref.#
<b>Program Type:</b>	3	
<b>Size Requirements:</b>	100 SF	
<b>Requirements:</b>		
<u>FINISHES:</u>	Spec. Ref #	
Flooring:		
Rubber	096500	
Base:		
Resilient	096500	
Ceiling:		
Suspended acoustical	095113	
Walls:		
Painted concrete masonry units	042000/ 099100	
<u>LOOSE FURNISHINGS:</u>		
N/A		
<u>ENVIRONMENTAL CONSIDERATIONS:</u>		
<ul style="list-style-type: none"> <li>• <b>Required: View glass – minimum 5% without daylighting design; minimum 3% with daylighting design.</b>  <b>Recommended: Daylighting design with glazing area determined by design solution.</b></li> <li>• Environmental sound control -  wall <b>only</b> minimum STC <b>45</b>  ceiling minimum CAC 35, NRC 0.70</li> </ul>		
<u>FEATURES<sup>1</sup>:</u>		
<u>Fixed Items:</u>		
10' of adjustable shelving		062000
Interior window		088000/081113
<u>Fire Suppression:</u>		
Fire suppression system		211000
<u>Plumbing:</u>		
N/A		
<u>HVAC:</u>		
Supply/return air system		Div. 23
Independent temperature control		230923
<u>Electrical:</u>		
Fluorescent lighting		265100
Illumination level: See Table 8600-5		
Single level switching		262726
Incandescent track lighting		265100
Track lighting		265100
4 duplex receptacles		262726
Double duplex receptacle adjacent to data port		262726
<u>Communications:</u>		
1 data port		271523
Central sound system		275123
<u>Electronic Safety and Security:</u>		
Life safety devices per code		283111
<u>Miscellaneous:</u>		
N/A		

NOTES:

1. Finishes/Features: Refer to Chapter 9 for specification references.

**04.4110 ENTREPRENEURSHIP**  
**04.0815 MARKETING COMMUNICATIONS**  
**04.0810 MARKETING MANAGEMENT**  
**Display**

CHAPTER 6: CAREER-TECHNICAL SCHOOL

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**07.0403 GROUND OPERATIONS**

CHAPTER 6: CAREER-TECHNICAL SCHOOL

**CT-P3-1**

<b><u>PROGRAM DESCRIPTION:</u></b>		<b>FEATURES<sup>1</sup>:</b>		Spec.
This program is geared toward the Airport Environment and activities concerning the ground support of commercial aircraft, terminal and hanger activities.		<b><u>Fixed Items:</u></b>		<b>Ref.#</b>
<b>Program Type:</b>	3	<b>24' of chalk/marker board, tack board, or tackable wall surface</b>		101100
<b>Size Requirements:</b>	1,500 SF Lab	30' of wall cabinets		123550
<b>Lab Requirements:</b>		30' of sink base cabinets w/2 sinks		123550
		Pencil sharpener support ( <i>optional</i> )		062000
		Windows with integral blinds		085113
		(2) Paper towel dispensers		102813
		Projection screen 6'x8'		115213
		<b><u>Fire Suppression:</u></b>		
		Fire suppression system		211000
		<b><u>Plumbing:</u></b>		
		Plumbing connections		221116/221119/224000
<b><u>FINISHES:</u></b>		<b><u>HVAC:</u></b>		
<b>Flooring:</b>		Supply/return air system		Div. 23
Carpet	Spec. Ref # 096816	Independent temperature control		230923
Option: ET,	096500			
sheet vinyl, or linoleum	096516	<b><u>Electrical:</u></b>		
<b>Base:</b>		Fluorescent lighting		265100
Resilient	096500	Illumination level: See Table 8600-5		
<b>Ceiling:</b>		Multilevel switching		262726
Suspended acoustical	095113	20 duplex receptacles		262726
<b>Walls:</b>		Double duplex receptacle adjacent to each data and video port		262726
Painted concrete masonry units	042000/ 099100	<b><u>Communications:</u></b>		
<b><u>LOOSE FURNISHINGS:</u></b>		1 video port		271533/271543
(24) Student stools/chairs		1 voice port and phone		271513/ <b>273123</b>
(12) 2-person work tables w/epoxy tops		8 data ports		271513
Wastebasket		Clock		275313
		Central sound system		275123
		Sound reinforcement system		275127
		Overhead projector		274119
		<b><u>Electronic Safety and Security:</u></b>		
		Life safety devices per code		283111
		<b><u>Miscellaneous:</u></b>		
		<b>Pencil sharpener (<i>optional</i>)</b>		

**NOTES:**

1. Finishes/Features: Refer to Chapter 9 for specification references.

**17.0403 GROUND OPERATIONS****Reference Room**

## CHAPTER 6: CAREER-TECHNICAL SCHOOL

<p><b>Program Type:</b> 3</p> <p><b>Size Requirements:</b> 150 SF</p> <p><b>Requirements:</b></p> <p><u>FINISHES:</u></p> <p>Flooring:</p> <p>Carpet 096816</p> <p>Option: ET, 096500</p> <p>sheet vinyl, or linoleum 096516</p> <p>Base:</p> <p>Resilient 096500</p> <p>Ceiling:</p> <p>Suspended acoustical 095113</p> <p>Walls:</p> <p>Painted concrete masonry units 042000/ 099100</p> <p><u>LOOSE FURNISHINGS:</u></p> <p>Student chairs</p> <p>Wastebasket</p> <p>ENVIRONMENTAL CONSIDERATIONS:</p> <ul style="list-style-type: none"> <li>• <b>Required: View glass – minimum 5% without daylighting design; minimum 3% with daylighting design.</b></li> <li>• <b>Recommended: Daylighting design with glazing area determined by design solution.</b></li> <li>• Environmental sound control - wall <b>only</b> minimum STC <b>45</b> ceiling minimum CAC 35, NRC 0.70</li> </ul>	<p style="text-align: right;">Spec. Ref.#</p> <p><u>FEATURES<sup>1</sup>:</u></p> <p><u>Fixed Items:</u></p> <p>34' of plastic laminate counter 062000</p> <p>27' of adjustable shelving 062000</p> <p>Interior window 088000/081113</p> <p><u>Fire Suppression:</u></p> <p>Fire suppression system 211000</p> <p><u>Plumbing:</u></p> <p>N/A</p> <p><u>HVAC:</u></p> <p>Supply/return air system Div. 23</p> <p>Independent temperature control 230923</p> <p><u>Electrical:</u></p> <p>Fluorescent lighting 265100</p> <p>Illumination level: See Table 8600-5</p> <p>Single level switching 262726</p> <p>2 duplex receptacles 262726</p> <p>Double duplex receptacle adjacent to each data port 262726</p> <p><u>Communications:</u></p> <p>6 data ports 271513</p> <p>Clock 275313</p> <p>Central sound system 275123</p> <p><u>Electronic Safety and Security:</u></p> <p>Life safety devices per code 283111</p> <p><u>Miscellaneous:</u></p> <p>N/A</p>
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NOTES:

1. Finishes/Features: Refer to Chapter 9 for specification references.

**33.0010 LODGING  
CT-P3-1**

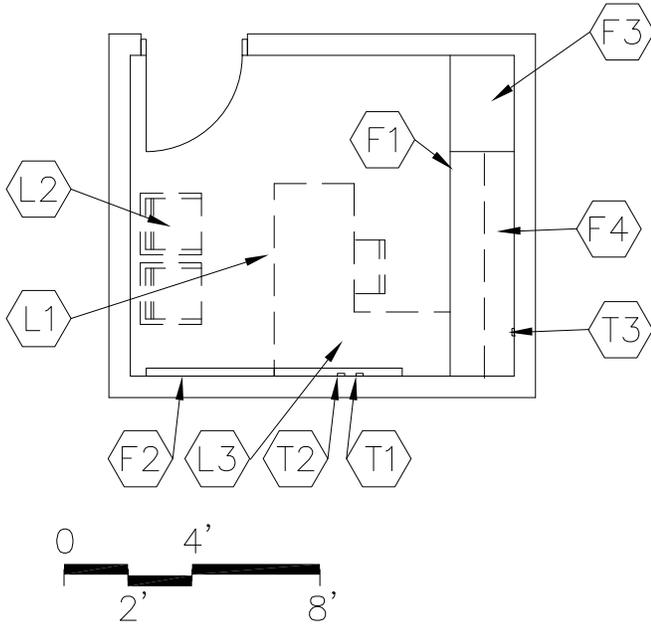
CHAPTER 6: CAREER-TECHNICAL SCHOOL

<b><u>PROGRAM DESCRIPTION:</u></b>		<b>Spec.</b>
Educational programs in lodging prepare learners for careers in the management, marketing and operations of lodging facilities.		<b>Ref.#</b>
<b>Program Type:</b>	3	
<b>Size Requirements:</b>	1,500 SF Lab	
<b>Lab Requirements:</b>		
<b><u>FINISHES:</u></b>	<b>Spec.</b>	
<b>Flooring:</b>	<b>Ref #</b>	
Carpet	096816	
Optional: ET, sheet vinyl, or linoleum	096500 096516	
<b>Base:</b>		
Resilient	096500	
<b>Ceiling:</b>		
Suspended acoustical	095113	
<b>Walls:</b>		
Painted concrete masonry units	042000/ 099100	
<b><u>LOOSE FURNISHINGS:</u></b>		
(8) Work stations		
(24) Student stools/chairs		
(1) Teacher station & chair		
Wastebasket		
<b><u>Miscellaneous:</u></b>		
<b><i>Pencil sharpener (optional)</i></b>		
<b><u>FEATURES<sup>1</sup>:</u></b>		
<b><u>Fixed Items:</u></b>		
<b><i>24' of chalk/marker board, tack board, or tackable wall surface</i></b>		101100
24' of wall cabinets		123550
24' of sink base cabinets w/2 sinks		123550
14' of reception counter		123550
Pencil sharpener support ( <i>optional</i> )		062000
Windows with integral blinds		085113
(2) Paper towel dispensers		102813
(2) Garbage disposals		113100
(2) Dishwashers		113100
(2) Ovens		113100
(2) Refrigerators		113100
(2) Microwave ovens		113100
(1) Washer and Dryer		113100
Projection screen, 6'x8'		115213
<b><u>Fire Suppression:</u></b>		
Fire suppression system		211000
<b><u>Plumbing:</u></b>		
1 Utility sink		
Plumbing connections		221116/221119/224000
<b><u>HVAC:</u></b>		
Supply/return air system		Div. 23
Independent temperature control		230923
Localized exhaust at laundry/ linen area and oven area		Div. 23
<b><u>Electrical:</u></b>		
Fluorescent lighting		265100
Illumination level: See Table 8600-5		
Multilevel switching		262726
20 duplex receptacles		262726
Double duplex receptacle adjacent to each data and video port		262726
<b><u>Communications:</u></b>		
1 video port		271533/271543
1 voice port and phone		271513/ <b>273123</b>
1 data port near teacher workstation		271513
8 data ports		271513
Clock		275313
Central sound system		275123
Sound reinforcement system		275127
Overhead projector		274119
<b><u>Electronic Safety and Security:</u></b>		
Life safety devices per code		283111

**NOTES:**

1. Finishes/Features: Refer to Chapter 9 for specification references.
2. Based on curriculum needs, a training restroom and laundry room may be included with this program in the allotted square footage for the lab. Space plates for training restroom and laundry room can be found on pages 6314-41 and 6314-42 – Patient Care Technician.





PROGRAM ACTIVITIES:

- Private space for program instructor
- One-on-one conferences with academic instructors, students, etc.

SPATIAL RELATIONSHIPS:

- Near related lab
- Direct access to school circulation areas

ENVIRONMENTAL CONSIDERATIONS:

- Environmental sound control -  
wall minimum STC 45  
ceiling minimum CAC 35, NRC 0.70

CAPACITY: 1 - 3 persons  
SIZE: 120 SF

NOTES:

1. Loose furnishings shown represent one of many possible arrangements.

**OFFICE  
CT-P3-2**

## CHAPTER 6: CAREER-TECHNICAL SCHOOL

<u>FINISHES<sup>1</sup>:</u>	Spec. Ref.#	<u>FEATURES<sup>1</sup>:</u>	Spec. Ref.#
Flooring:		<u>Fixed Items:</u>	
Carpet or carpet tile	096816	F1 Work surface with file drawers	123550
	096813	F2 4' of tack board	101100
		or tackable wall surface	
Base:		F3 Tall wardrobe	123550
Resilient base	096500	F4 Wall cabinets above work surface	123550
Ceiling:		<u>Fire Suppression:</u>	
Suspended, acoustical	095113	Fire suppression system	211000
Walls:		<u>Plumbing:</u>	
Painted gypsum wallboard		N/A	
over metal studs	092116/099100		
<u>LOOSE FURNISHINGS:</u>		<u>HVAC:</u>	
L1 Desk and chair		Supply/return air system	Div. 23
L2 Visitor chairs		Independent temperature control	230923
L3 Computer desk return			
Wastebasket		<u>Electrical:</u>	
		Single level switching	262726
		Fluorescent lighting	265100
		Illumination level: See Table 8600-5	
		4 duplex receptacles	262726
		Double duplex receptacle adjacent	
		to data and video port	262726
		<u>Communications:</u>	
		T1 1 voice port and phone	271513/ <b>273123</b>
		T2 1 data port near workstation	271523
		T3 1 video port	271533/271543
		Central sound system	275123
		Clock	275313
		<u>Electronic Safety and Security:</u>	
		Life safety devices per code	283111
		<u>Miscellaneous:</u>	
		N/A	

NOTES:

1. Finishes/Features: Refer to Chapter 9 for specification references. Optional: moveable cabinets
2. Fixed casework and loose furnishings can also be all fixed casework or all loose furnishings.

**PROGRAM ACTIVITIES:**

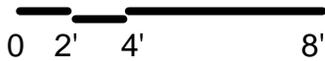
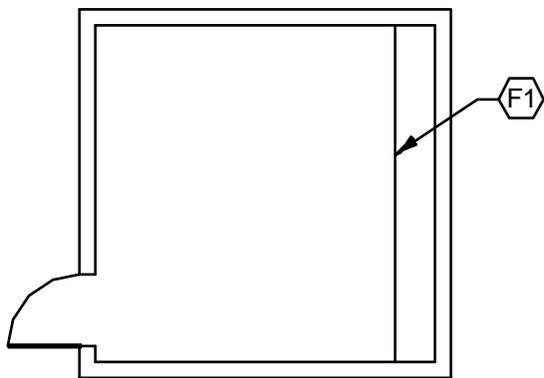
- Space for storage of lab equipment

**SPATIAL RELATIONSHIPS:**

- Near related lab

**ENVIRONMENTAL CONSIDERATIONS:**

N/A



CAPACITY:  
SIZE:

N/A  
200 SF

NOTES:

**STORAGE AREA  
CT-P3-3**
**CHAPTER 6: CAREER-TECHNICAL SCHOOL**

<u>FINISHES<sup>1</sup>:</u>	Spec. Ref.#	<u>FEATURES<sup>1</sup>:</u>	Spec. Ref.#
Flooring:		<u>Fixed Items<sup>1</sup>:</u>	
<b>Sealed</b> concrete	033000	F1 8'-20' of open shelving	
		Depth may vary (fixed or loose)	123550
Base:		<u>Fire Suppression:</u>	
Resilient base	096500	Fire suppression system	211000
Ceiling:		<u>Plumbing:</u>	
Exposed structure	---	N/A	
Walls:		<u>HVAC:</u>	
Painted concrete masonry units	042000/099100	To be determined by Design Professional	
		Supplemental heat as required	Div. 23
<u>LOOSE FURNISHINGS:</u>		<u>Electrical:</u>	
N/A		Single level switching	262726
		Fluorescent lighting	265100
		Illumination level: See Table 8600-5	
		Duplex receptacles	262726
		<u>Communications:</u>	
		N/A	
		<u>Electronic Safety and Security:</u>	
		Life safety devices per code	283111
		<u>Miscellaneous:</u>	
		N/A	

**NOTES:**

1. Finishes/Features: Refer to Chapter 9 for specification references.

TABLE OF CONTENTS

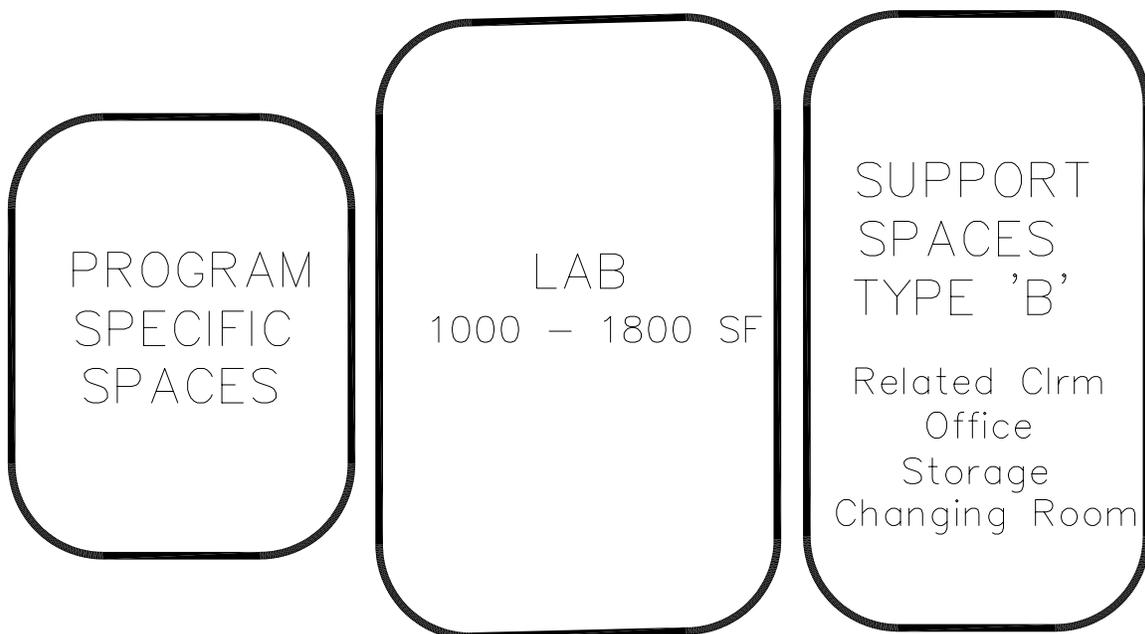
A.	General Description .....	6314-3
B.	Program Example .....	6314-4
C.	Lab Plate Example .....	6314-5
D.	Lab Descriptions	
	▶ Animal Science and Management (small animal) -----	6314-7
	Pet Shop .....	6314-8
	Clinic .....	6314-9
	Grooming .....	6314-10
	Animal Room #1 .....	6314-11
	Animal Room #2 .....	6314-12
	Kennel .....	6314-13
	▶ Career Paths for the Law Profession -----	6314-14
	Weight Room .....	6314-15
	Interrogation Room .....	6314-16
	▶ Clinical Health Care Services -----	6314-17
	Training Restroom .....	6314-18
	Laundry Room .....	6314-19
	▶ Cosmetology -----	6314-20
	Dispensary .....	6314-21
	Laundry Room .....	6314-22
	Facial Room .....	6314-23
	Manicure Room .....	6314-24
	Customer Toilet .....	6314-25
	▶ Criminal Justice -----	6314-14
	Weight Room .....	6314-15
	Interrogation Room .....	6314-16
	▶ Culinary and Food Service Operations -----	6314-26
	Restaurant .....	6314-27
	Dry Storage .....	6314-28
	▶ Dental Assistant -----	6314-29
	X-Ray .....	6314-30
	Darkroom .....	6314-31
	▶ Diagnostic Pathway -----	6314-32
	Exam Room .....	6314-33

TABLE OF CONTENTS (continued)

▶ Firefighter Training -----	6314-34
Weight Room .....	6314-35
▶ Media Arts -----	6314-36
Control Room / Edit .....	6314-37
Vestibule .....	6314-38
▶ <b>Medical Assistant</b> -----	<b>6314-17</b>
<b>Training Restroom</b> .....	<b>6314-18</b>
<b>Laundry Room</b> .....	<b>6314-19</b>
▶ Nurse Assisting -----	6314-17
Training Restroom .....	6314-18
Laundry Room .....	6314-19
▶ Optometric Occupations -----	6314-39
Exam Room .....	6314-40
▶ Patient Care Technician -----	6314-41
Training Restroom .....	6314-42
Laundry Room .....	6314-43
▶ Performing Arts -----	6314-44
Practice Room .....	6314-45
▶ Private Security -----	6314-14
Weight Room .....	6314-15
Interrogation Room .....	6314-16
▶ Surgical Technology -----	6314-46
Operating Room .....	6314-47
Instrument Room .....	6314-48
Scrub Room .....	6314-49
E. Related Classroom Plate .....	6314-51
F. Office Plate .....	6313-53
G. Storage Area Plate .....	6314-55
H. Changing Room Plate .....	6314-57

**Program Type 4**

Description: Small to medium sized lab space with typical support space. Additionally, this program requires specialized auxiliary spaces. This program is to utilize standard construction and be one-story (**12'** +/-) tall. Lab, support, and specialized space to have finished floor, painted walls, and suspended acoustical ceiling.

**NOTES:**

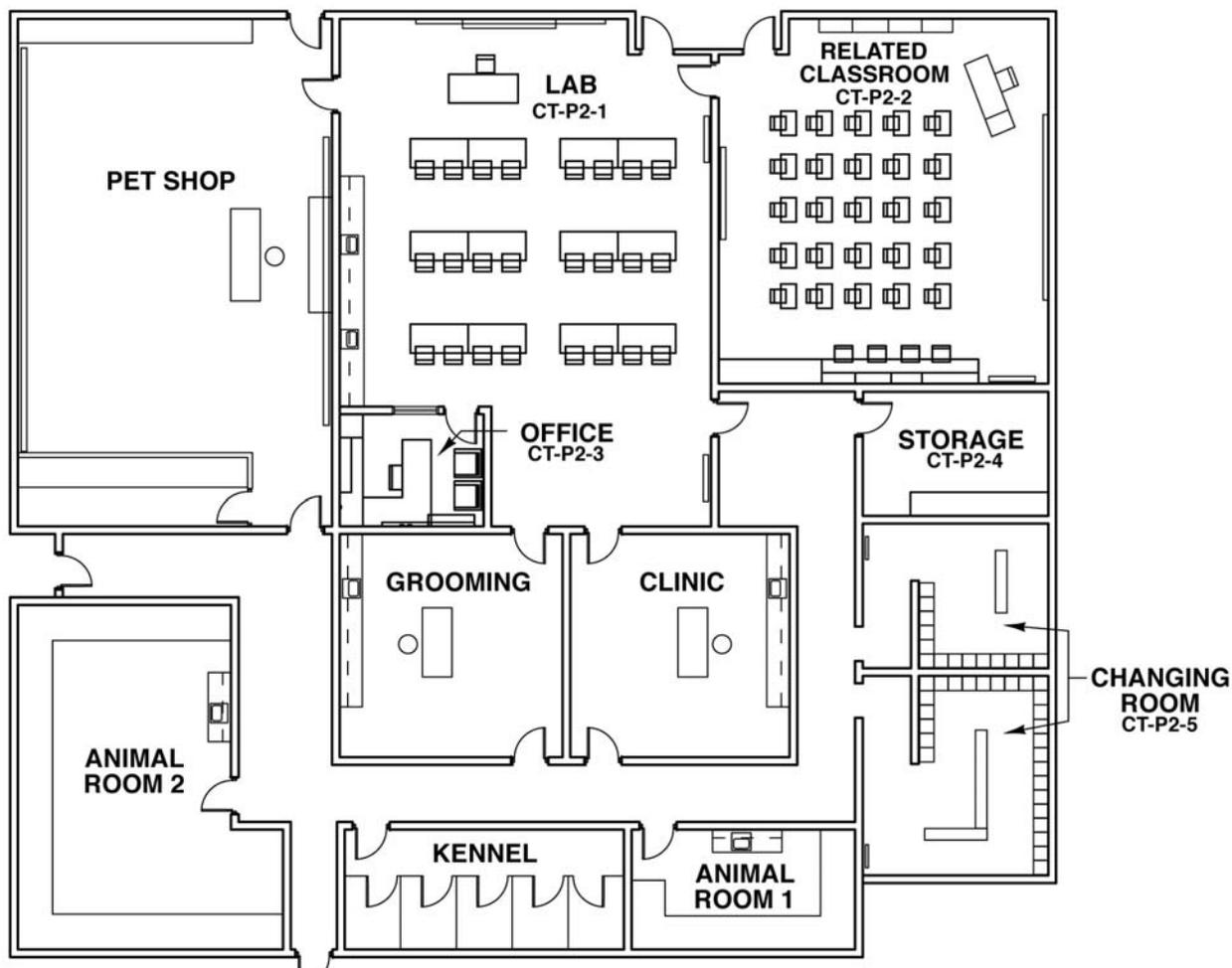
This is an example of how the Program Type 4 spaces in a career-technical school could be arranged. This is meant only to demonstrate the relationships between various spaces of this area.

Following are the Program Type 4 space plates:

- CT-P4-1 Lab
- CT-P4-2 Related Classroom
- CT-P4-3 Office
- CT-P4-4 Storage
- CT-P4-5 Changing Room

**PROGRAM TYPE 4  
EXAMPLE**

CHAPTER 6: CAREER-TECHNICAL SCHOOL

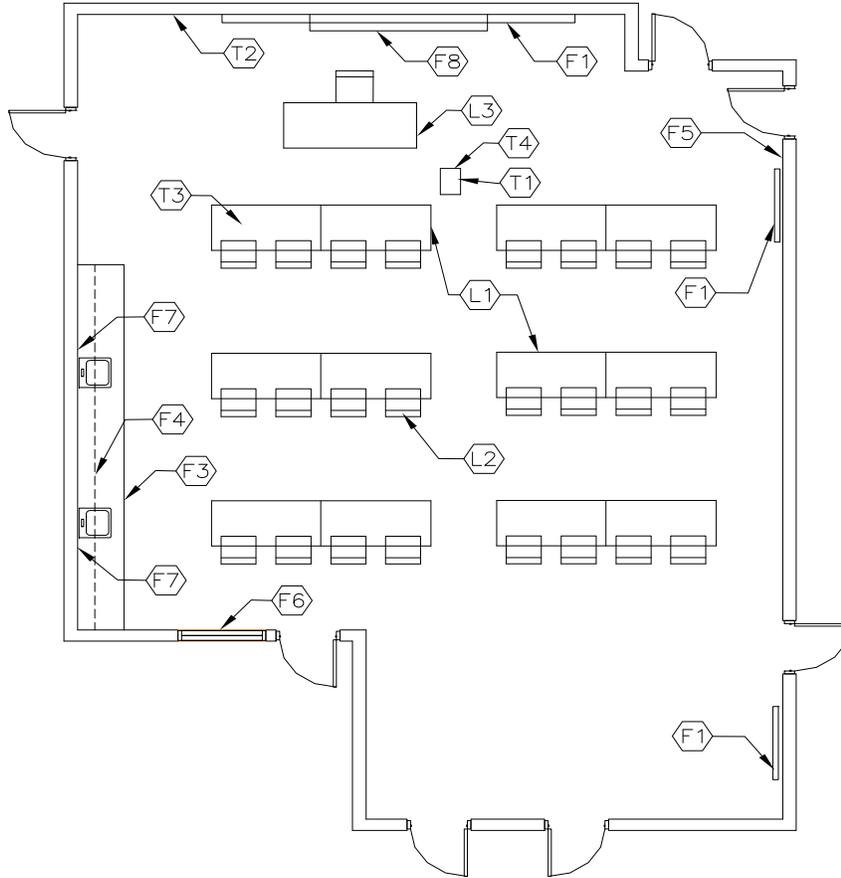


**Program Type 4: Animal Science and Management (small animal)**

This is an example to show the possible relationships of spaces for this program type.

NOTES:

1. See lab descriptions within this section for specific lab requirements.
2. See individual space plates at the end of this section for specific requirements.



CAPACITY:	24 Students
SIZE:	1,000 – 1,800 SF
	(see lab summaries for exact sizes)
ANCILLARY SPACES:	CT-P4-2 thru CT-P4-5

**NOTES:**

1. Loose furnishings shown represent one of many possible arrangements.
2. Graphic plate is an example only. Other labs within this program are not drawn – refer to lab summaries within this program type for information on a particular lab.

**LAB**  
**CT-P4-1**

CHAPTER 6: CAREER-TECHNICAL SCHOOL

PROGRAM ACTIVITIES:

- Large and small group instruction
- Group and individual work
- Demonstrations

SPATIAL RELATIONSHIPS:

- Near other related labs
- Adjacent to typical support spaces
- Proximity to large group restrooms
- Located away from noisy or public activities
- Proximity to core academic area and common use areas
- Flexibility of space

ENVIRONMENTAL CONSIDERATIONS:

- **Required: View glass – minimum 5% without daylighting design; minimum 3% with daylighting design.**  
**Recommended: Daylighting design with glazing area determined by design solution.**
- Environmental sound control -  
wall **only** minimum STC **45**  
ceiling minimum CAC 35, NRC 0.70

NOTES:

1. Finishes/Features: Refer to Chapter 9 for specification references.
2. Loose Furnishings: Refer to Lab Profiles within this section.
3. Loose Furnishings, fixed equipment, utility locations, and general footprint of room shown represent one of many possible arrangements.

**01.0901 ANIMAL SCIENCE AND MANAGEMENT (small animal)**

CHAPTER 6: CAREER-TECHNICAL SCHOOL

**CT-P4-1**

<b><u>PROGRAM DESCRIPTION:</u></b> Applies principles of animal anatomy, physiology, genetics, behavior and nutrition to the research and development, selection and reproduction, health, and management of animals in a domestic and/or natural environment.		<b>FEATURES<sup>1</sup>:</b> <u>Fixed Items:</u>	Spec. Ref.#
<b>Program Type:</b>	4	F1 <b>24' of chalk/marker board, tack board, or tackable wall surface</b>	101100
<b>Size Requirements:</b>	1,000 SF Lab	F2 <b>Reserved</b>	
<b>Lab Requirements:</b>		F3 20' of sink base cabinets w/2 sinks	123550
		F4 20' of wall cabinets	123550
		F5 Pencil sharpener support ( <i>optional</i> )	062000
		F6 Windows with integral blinds	085113
		F7 (2) Paper towel dispenser	102813
		F8 Projection screen, 6'x8'	115213
		<b>Fire Suppression:</b>	
		Fire suppression system	211000
		<b>Plumbing:</b>	
		Plumbing connections	221116/221119/224000
		Handwashing lavatory	224000
		<b>HVAC:</b>	
		Supply/return air system	Div. 23
		Independent temperature control	230923
		<b>Electrical:</b>	
		Fluorescent lighting	265100
		Illumination level: See Table 8600-5	
		Multilevel switching	262726
		10 duplex receptacles	262726
		Double duplex receptacle adjacent to each data and video port	262726
		<b>Communications:</b>	
		T1 1 video port	271533/271543
		T2 1 voice port and phone	271513/ <b>273123</b>
		1 data port near teacher workstation	271513
		T3 8 data ports	271513
		Clock	275313
		Central sound system	275123
		Sound reinforcement system	275127
		T4 Overhead projector	274119
		<b>Electronic Safety and Security:</b>	
		Life safety devices per code	283111
		<b>Miscellaneous:</b>	
		<b>Pencil sharpener (<i>optional</i>)</b>	
		<b><u>SITE FEATURE:</u></b>	
		Plan for a dog kennel if required by school curriculum requirements.	
<b><u>FINISHES:</u></b>	Spec. Ref #		
Flooring:			
ET,	096500		
sheet vinyl, linoleum,	096516		
polished concrete finishing,	033510		
or colored concrete finishing	033519		
Base:			
Resilient	096500		
Ceiling:			
Suspended acoustical	095113		
Walls:			
Painted concrete masonry units	042000/ 099100		
<b><u>LOOSE FURNISHINGS:</u></b>			
L1 (12) Two-person work tables			
L2 (24) Student chairs/stools			
L3 (1) Teacher station & chair			
Wastebasket			

**NOTES:**

1. Finishes/Features: Refer to Chapter 9 for specification references.

**01.0901 ANIMAL SCIENCE AND MANAGEMENT (small animal)****Pet Shop**

## CHAPTER 6: CAREER-TECHNICAL SCHOOL

		Spec. Ref.#
<b>Program Type:</b>	4	
<b>Size Requirements:</b>	1,200 SF	
<b>Requirements:</b>		
<u>FINISHES:</u>	Spec. Ref #	
Flooring:		
ET, sheet vinyl, linoleum,	096500	
polished concrete finishing,	096516	
or colored concrete finishing	033510	
	033519	
Base:		
Resilient	096500	
Ceiling:		
Suspended acoustical	095113	
Walls:		
Painted concrete masonry units	042000/ 099100	
<u>LOOSE FURNISHINGS:</u>		
Stool		
Wastebasket		
<b>ENVIRONMENTAL CONSIDERATIONS:</b>		
• <b>Required:</b> View glass – minimum 5% without daylighting design; minimum 3% with daylighting design.		
• <b>Recommended:</b> Daylighting design with glazing area determined by design solution.		
• Environmental sound control - wall <b>only</b> minimum STC 45 ceiling minimum CAC 35, NRC 0.70		
		<b>FEATURES<sup>1</sup>:</b>
		<u>Fixed Items:</u>
		8' of counter 123550
		30' of base cabinets 123550
		60' of adjustable wall display system 060565
		Glass enclosed animal display wall 084113
		<u>Fire Suppression:</u>
		Fire suppression system 211000
		<u>Plumbing:</u>
		Plumbing connections 221116/221119/224000
		Handwashing lavatory 224000
		<u>HVAC:</u>
		Supply/return air system Div. 23
		Independent temperature control 230923
		Independent ventilation Div. 23
		<u>Electrical:</u>
		Fluorescent lighting 265100
		Illumination level: See Table 8600-5
		Multilevel switching 262726
		Incandescent track lighting 265100
		9 duplex receptacles 262726
		Double duplex receptacle adjacent to each data port 262726
		<u>Communications:</u>
		1 voice port and phone 271513/ <b>273123</b>
		2 data ports 271513
		Clock 275313
		Central sound system 275123
		<u>Electronic Safety and Security:</u>
		Life safety devices per code 283111
		<u>Miscellaneous:</u>
		N/A

NOTES:

1. Finishes/Features: Refer to Chapter 9 for specification references.

**01.0901 ANIMAL SCIENCE AND MANAGEMENT (small animal)**

## CHAPTER 6: CAREER-TECHNICAL SCHOOL

**Clinic**

<b>Program Type:</b> 4		<b>FEATURES<sup>1</sup>:</b>	Spec. Ref.#
<b>Size Requirements:</b> 350 SF		<b>Fixed Items:</b>	
		15' of base cabinets w/1 sink	123550
		15' of wall cabinets	123550
		6' examination island	123550
		Paper towel dispenser	102813
<b>Requirements:</b>	Spec. Ref #	<b>Fire Suppression:</b>	
<b>FINISHES:</b>		Fire suppression system	211000
Flooring:		<b>Plumbing:</b>	
ET, sheet vinyl, linoleum,	096500	Plumbing connections	221116/221119/224000
polished concrete finishing,	096516		
or colored concrete finishing	033510 033519	<b>HVAC:</b>	
Base:		Supply/return air system	Div. 23
Resilient	096500	Independent temperature control	230923
Ceiling:		Independent ventilation	Div. 23
Suspended acoustical	095113	<b>Electrical:</b>	
Walls:		Fluorescent lighting	265100
Painted concrete masonry units	042000/ 099100	Illumination level: See Table 8600-5	
		Single level switching	262726
		4 duplex receptacles	262726
		Double duplex receptacle adjacent to each data port	262726
<b>LOOSE FURNISHINGS:</b>		<b>Communications:</b>	
Stool		2 data ports	271513
Wastebasket		Clock	275313
		Central sound system	275123
<b>ENVIRONMENTAL CONSIDERATIONS:</b>		<b>Electronic Safety and Security:</b>	
• <b>Required: View glass – minimum 5% without daylighting design; minimum 3% with daylighting design.</b>		Life safety devices per code	283111
• <b>Recommended: Daylighting design with glazing area determined by design solution.</b>		<b>Miscellaneous:</b>	
• Environmental sound control - wall <b>only</b> minimum STC <b>45</b> ceiling minimum CAC 35, NRC 0.70		N/A	

**NOTES:**

1. Finishes/Features: Refer to Chapter 9 for specification references.

**01.0901 ANIMAL SCIENCE AND MANAGEMENT (small animal)****Grooming**

## CHAPTER 6: CAREER-TECHNICAL SCHOOL

		Spec. Ref.#
<b>Program Type:</b>	4	
<b>Size Requirements:</b>	350 SF	
<b>Requirements:</b>		
<u>FINISHES:</u>	Spec. Ref #	
Flooring:		
ET, sheet vinyl, linoleum,	096500	
polished concrete finishing,	096516	
or colored concrete finishing	033510	
	033519	
Base:		
Resilient	096500	
Ceiling:		
Suspended acoustical	095113	
Walls:		
Painted concrete masonry units	042000/ 099100	
<u>LOOSE FURNISHINGS:</u>		
Stool		
Wastebasket		
ENVIRONMENTAL CONSIDERATIONS:		
<ul style="list-style-type: none"> <li><b>Required: View glass – minimum 5% without daylighting design; minimum 3% with daylighting design. Recommended: Daylighting design with glazing area determined by design solution.</b></li> <li>Environmental sound control - wall <b>only</b> minimum STC <b>45</b> ceiling minimum CAC 35, NRC 0.70</li> </ul>		
<u>FEATURES<sup>1</sup>:</u>		
<u>Fixed Items:</u>		
15' of base cabinets w/1 sink		123550
15' of wall cabinets		123550
6' grooming island		123550
Paper towel dispenser		102813
<u>Fire Suppression:</u>		
Fire suppression system		211000
<u>Plumbing:</u>		
Plumbing connections		221116/221119/224000
<u>HVAC:</u>		
Supply/return air system		Div. 23
Independent temperature control		230923
Independent ventilation		Div. 23
<u>Electrical:</u>		
Fluorescent lighting		265100
Illumination level: See Table 8600-5		
Single level switching		262726
4 duplex receptacles		262726
Double duplex receptacle adjacent to each data port		262726
<u>Communications:</u>		
2 data ports		271513
Clock		275313
Central sound system		275123
<u>Electronic Safety and Security:</u>		
Life safety devices per code		283111
<u>Miscellaneous:</u>		
N/A		

NOTES:

1. Finishes/Features: Refer to Chapter 9 for specification references.

**01.0901 ANIMAL SCIENCE AND MANAGEMENT (small animal)**

CHAPTER 6: CAREER-TECHNICAL SCHOOL

**Animal Room #1**

<b>Program Type:</b> 4		<b>FEATURES<sup>1</sup>:</b>	Spec.
<b>Size Requirements:</b> 200 SF		<u>Fixed Items:</u>	<u>Ref.#</u>
<b>Requirements:</b>		6' of base cabinets w/1 sink	123550
		6' of wall cabinets	123550
		20' of animal cage shelving	062000
		Paper towel dispenser	102813
		<b>Fire Suppression:</b>	
		Fire suppression system	211000
		<b>Plumbing:</b>	
		Plumbing connections	221116/221119/224000
		Handwashing lavatory	224000
		<b>HVAC:</b>	
		Supply/return air system	Div. 23
		Independent ventilation	Div. 23
		<b>Electrical:</b>	
		Fluorescent lighting	265100
		Illumination level: See Table 8600-5	
		Single level switching	262726
		4 duplex receptacles	262726
		<b>Communications:</b>	
		Central sound system	275123
		<b>Electronic Safety and Security:</b>	
		Life safety devices per code	283111
		<b>Miscellaneous:</b>	
		N/A	
<b>FINISHES:</b>			
<u>Ref #</u>			
<b>Flooring:</b>			
ET, sheet vinyl, linoleum,		096500	
polished concrete finishing,		096516	
or colored concrete finishing		033510	
		033519	
<b>Base:</b>			
Resilient		096500	
<b>Ceiling:</b>			
Suspended acoustical		095113	
<b>Walls:</b>			
Painted concrete masonry units		042000/ 099100	
<b>LOOSE FURNISHINGS:</b>			
Wastebasket			
<b>ENVIRONMENTAL CONSIDERATIONS:</b>			
<ul style="list-style-type: none"> <li><b>Required:</b> View glass – minimum 5% without daylighting design; minimum 3% with daylighting design. <b>Recommended:</b> Daylighting design with glazing area determined by design solution.</li> <li>Environmental sound control - wall <b>only</b> minimum STC 45 ceiling minimum CAC 35, NRC 0.70</li> </ul>			

**NOTES:**

1. Finishes/Features: Refer to Chapter 9 for specification references.

**01.0901 ANIMAL SCIENCE AND MANAGEMENT (small animal)****Animal Room #2**

## CHAPTER 6: CAREER-TECHNICAL SCHOOL

		Spec. Ref.#
<b>Program Type:</b>	4	
<b>Size Requirements:</b>	600 SF	
<b>Requirements:</b>		
<u>FINISHES:</u>	Spec. Ref #	
Flooring:		
ET, sheet vinyl, linoleum,	096500	
polished concrete finishing,	096516	
or colored concrete finishing	033510 033519	
Base:		
Resilient	096500	
Ceiling:		
Suspended acoustical	095113	
Walls:		
Painted concrete masonry units	042000/ 099100	
<u>LOOSE FURNISHINGS:</u>		
Stool		
Wastebasket		
<u>ENVIRONMENTAL CONSIDERATIONS:</u>		
• <b>Required:</b> View glass – minimum 5% without daylighting design; minimum 3% with daylighting design.		
<b>Recommended:</b> Daylighting design with glazing area determined by design solution.		
• Environmental sound control -		
wall <b>only</b> minimum STC 45		
ceiling minimum CAC 35, NRC 0.70		
		<b>FEATURES<sup>1</sup>:</b>
		<u>Fixed Items:</u>
		6' of base cabinets w/1 sink
		6' of wall cabinets
		50' of animal cage shelving
		Paper towel dispenser
		123550 123550 062000 102813
		<u>Fire Suppression:</u>
		Fire suppression system
		211000
		<u>Plumbing:</u>
		Plumbing connections
		221116/221119/224000
		Handwashing lavatory
		224000
		<u>HVAC:</u>
		Supply/return air system
		Div. 23
		Independent ventilation
		Div. 23
		<u>Electrical:</u>
		Fluorescent lighting
		265100
		Illumination level: See Table 8600-5
		Single level switching
		262726
		4 duplex receptacles
		262726
		<u>Communications:</u>
		Central sound system
		275123
		<u>Electronic Safety and Security:</u>
		Life safety devices per code
		283111
		<u>Miscellaneous:</u>
		N/A

NOTES:

1. Finishes/Features: Refer to Chapter 9 for specification references.



**17.2810 CAREER PATHS FOR THE LAW PROFESSION**  
**17.2802 CRIMINAL JUSTICE**  
**17.2808 PRIVATE SECURITY**  
**CT-P4-1**

CHAPTER 6: CAREER-TECHNICAL SCHOOL

<p><b>PROGRAM DESCRIPTION:</b>  <u>CPLP:</u> Introduction of career major courses and application of knowledge and skills to prepare students for entry level, technical and professional career options within the law and public administration professions.  <u>CJ:</u> Utilizing business and industry, math, science and technology standards. Introduces concept of training provided by officially designated law enforcement agencies. The program must be certified by the Ohio Peace Officers Training Commission.  <u>PS:</u> A one-year program utilizing business and industry, math, science and technology standards. Introduces concept of physical and personal security, internal loss, and facility access.</p> <p><b>Program Type:</b> 4</p> <p><b>Size Requirements:</b> 1,200 SF Lab</p> <p>Lab Requirements:</p> <table style="width: 100%; border: none;"> <tr> <td></td> <td style="text-align: right;">Spec.</td> </tr> <tr> <td><b>FINISHES:</b></td> <td style="text-align: right;"><b>Ref #</b></td> </tr> <tr> <td>Flooring:</td> <td></td> </tr> <tr> <td>    Carpet</td> <td style="text-align: right;">096816</td> </tr> <tr> <td>    Option: ET,</td> <td style="text-align: right;">096500</td> </tr> <tr> <td>        sheet vinyl, or linoleum</td> <td style="text-align: right;">096516</td> </tr> <tr> <td>Base:</td> <td></td> </tr> <tr> <td>    Resilient</td> <td style="text-align: right;">096500</td> </tr> <tr> <td>Ceiling:</td> <td></td> </tr> <tr> <td>    Suspended acoustical</td> <td style="text-align: right;">095113</td> </tr> <tr> <td>Walls:</td> <td></td> </tr> <tr> <td>    Painted concrete masonry units</td> <td style="text-align: right;">042000/ 099100</td> </tr> </table>		Spec.	<b>FINISHES:</b>	<b>Ref #</b>	Flooring:		Carpet	096816	Option: ET,	096500	sheet vinyl, or linoleum	096516	Base:		Resilient	096500	Ceiling:		Suspended acoustical	095113	Walls:		Painted concrete masonry units	042000/ 099100	<table style="width: 100%; border: none;"> <tr> <td><b>FEATURES<sup>1</sup>:</b></td> <td style="text-align: right;">Spec.</td> </tr> <tr> <td><u>Fixed Items:</u></td> <td style="text-align: right;"><u>Ref.#</u></td> </tr> <tr> <td>    <b>32' of chalk/marker board, tack board, or tackable wall surface</b></td> <td style="text-align: right;">101100</td> </tr> <tr> <td>    30' of sink base cabinets w/1 sink</td> <td style="text-align: right;">123550</td> </tr> <tr> <td>    30' of wall cabinets</td> <td style="text-align: right;">123550</td> </tr> <tr> <td>    Pencil sharpener support (<i>optional</i>)</td> <td style="text-align: right;">062000</td> </tr> <tr> <td>    Windows with integral blinds</td> <td style="text-align: right;">085113</td> </tr> <tr> <td>    Paper towel dispenser</td> <td style="text-align: right;">102813</td> </tr> <tr> <td>    Projection screen, 6'x8'</td> <td style="text-align: right;">115213</td> </tr> <tr> <td><u>Fire Suppression:</u></td> <td></td> </tr> <tr> <td>    Fire suppression system</td> <td style="text-align: right;">211000</td> </tr> <tr> <td><u>Plumbing:</u></td> <td></td> </tr> <tr> <td>    Plumbing connections</td> <td style="text-align: right;">221116/221119/224000</td> </tr> <tr> <td><u>HVAC:</u></td> <td></td> </tr> <tr> <td>    Supply/return air system</td> <td style="text-align: right;">Div. 23</td> </tr> <tr> <td>    Independent temperature control</td> <td style="text-align: right;">230923</td> </tr> <tr> <td><u>Electrical:</u></td> <td></td> </tr> <tr> <td>    Fluorescent lighting</td> <td style="text-align: right;">265100</td> </tr> <tr> <td>        Illumination level: See Table 8600-5</td> <td></td> </tr> <tr> <td>    Multilevel switching</td> <td style="text-align: right;">262726</td> </tr> <tr> <td>    20 duplex receptacles (minimum)</td> <td style="text-align: right;">262726</td> </tr> <tr> <td>    Double duplex receptacle adjacent to each data and video port</td> <td style="text-align: right;">262726</td> </tr> <tr> <td><u>Communications:</u></td> <td></td> </tr> <tr> <td>    1 video port</td> <td style="text-align: right;">271533/271543</td> </tr> <tr> <td>    1 voice port and phone</td> <td style="text-align: right;">271513/<b>273123</b></td> </tr> <tr> <td>    1 data port near teacher workstation</td> <td style="text-align: right;">271513</td> </tr> <tr> <td>    8 data ports</td> <td style="text-align: right;">271513</td> </tr> <tr> <td>    Clock</td> <td style="text-align: right;">275313</td> </tr> <tr> <td>    Central sound system</td> <td style="text-align: right;">275123</td> </tr> <tr> <td>    Sound reinforcement system</td> <td style="text-align: right;">275127</td> </tr> <tr> <td>    Overhead projector</td> <td style="text-align: right;">274119</td> </tr> <tr> <td><u>Electronic Safety and Security:</u></td> <td></td> </tr> <tr> <td>    Life safety devices per code</td> <td style="text-align: right;">283111</td> </tr> <tr> <td><u>Miscellaneous:</u></td> <td></td> </tr> <tr> <td>    <b>Pencil sharpener (optional)</b></td> <td></td> </tr> <tr> <td><u>LOOSE FURNISHINGS:</u></td> <td></td> </tr> <tr> <td>    (12) Two-person work tables</td> <td></td> </tr> <tr> <td>    (24) Student chairs/stools</td> <td></td> </tr> <tr> <td>    (1) Teacher station &amp; chair</td> <td></td> </tr> <tr> <td>    Wastebasket</td> <td></td> </tr> </table>	<b>FEATURES<sup>1</sup>:</b>	Spec.	<u>Fixed Items:</u>	<u>Ref.#</u>	<b>32' of chalk/marker board, tack board, or tackable wall surface</b>	101100	30' of sink base cabinets w/1 sink	123550	30' of wall cabinets	123550	Pencil sharpener support ( <i>optional</i> )	062000	Windows with integral blinds	085113	Paper towel dispenser	102813	Projection screen, 6'x8'	115213	<u>Fire Suppression:</u>		Fire suppression system	211000	<u>Plumbing:</u>		Plumbing connections	221116/221119/224000	<u>HVAC:</u>		Supply/return air system	Div. 23	Independent temperature control	230923	<u>Electrical:</u>		Fluorescent lighting	265100	Illumination level: See Table 8600-5		Multilevel switching	262726	20 duplex receptacles (minimum)	262726	Double duplex receptacle adjacent to each data and video port	262726	<u>Communications:</u>		1 video port	271533/271543	1 voice port and phone	271513/ <b>273123</b>	1 data port near teacher workstation	271513	8 data ports	271513	Clock	275313	Central sound system	275123	Sound reinforcement system	275127	Overhead projector	274119	<u>Electronic Safety and Security:</u>		Life safety devices per code	283111	<u>Miscellaneous:</u>		<b>Pencil sharpener (optional)</b>		<u>LOOSE FURNISHINGS:</u>		(12) Two-person work tables		(24) Student chairs/stools		(1) Teacher station & chair		Wastebasket	
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**NOTES:**

1. Finishes/Features: Refer to Chapter 9 for specification references.

**17.2810 CAREER PATHS FOR THE LAW PROFESSION**  
**17.2802 CRIMINAL JUSTICE**  
**17.2808 PRIVATE SECURITY**

## CHAPTER 6: CAREER-TECHNICAL SCHOOL

**Weight Room**

		Spec. Ref.#	
<b>Program Type:</b>	4		
<b>Size Requirements:</b>	800 SF		
<b>Requirements:</b>			
<u>FINISHES:</u>	Spec. Ref #		
Flooring:			
ET, sheet vinyl, or linoleum	096500		
Option: <b>Sealed</b> concrete	096516 033000		
Base:			
Resilient	096500		
Ceiling:			
Suspended acoustical	095113		
Walls:			
Painted concrete masonry units	042000/ 099100		
<u>LOOSE FURNISHINGS:</u>			
N/A			
ENVIRONMENTAL CONSIDERATIONS:			
• <b>Required: View glass – minimum 5% without daylighting design; minimum 3% with daylighting design.</b>			
<b>Recommended: Daylighting design with glazing area determined by design solution.</b>			
• Environmental sound control -			
wall <b>only</b> minimum STC <b>45</b>			
ceiling minimum CAC 35, NRC 0.70			
		<u>FEATURES<sup>1</sup>:</u>	
		<u>Fixed Items:</u>	
		N/A	
		<u>Fire Suppression:</u>	
		Fire suppression system	211000
		<u>Plumbing:</u>	
		N/A	
		<u>HVAC:</u>	
		Supply/return air system	Div. 23
		Independent temperature control	230923
		<u>Electrical:</u>	
		Fluorescent lighting	265100
		Illumination level: See Table 8600-5	
		Single level switching	262726
		4 duplex receptacles	262726
		<u>Communications:</u>	
		Clock	275313
		Central sound system	275123
		<u>Electronic Safety and Security:</u>	
		Life safety devices per code	283111
		<u>Miscellaneous:</u>	
		N/A	

NOTES:

1. Finishes/Features: Refer to Chapter 9 for specification references.

**17.2810 CAREER PATHS FOR THE LAW PROFESSION**  
**17,2802 CRIMINAL JUSTICE**  
**17.2808 PRIVATE SECURITY**  
**Interrogation Room**

## CHAPTER 6: CAREER-TECHNICAL SCHOOL

		Spec. Ref.#
<b>Program Type:</b>	4	
<b>Size Requirements:</b>	150 SF	
<b>Requirements:</b>		
<u>FINISHES:</u>	Spec. Ref #	
Flooring:		
ET, sheet vinyl, or linoleum	096500 096516	
Base:		
Resilient	096500	
Ceiling:		
Suspended acoustical	095113	
Walls:		
Painted concrete masonry units	042000/ 099100	
<u>LOOSE FURNISHINGS:</u>		
(1) Table		
(4) Chairs		
<b>ENVIRONMENTAL CONSIDERATIONS:</b>		
<ul style="list-style-type: none"> <li><b>Required: View glass – minimum 5% without daylighting design; minimum 3% with daylighting design.</b>  <b>Recommended: Daylighting design with glazing area determined by design solution.</b></li> <li>Environmental sound control -  wall <b>only</b> minimum STC <b>45</b>  ceiling minimum CAC 35, NRC 0.70</li> </ul>		
<b>FEATURES<sup>1</sup>:</b>		
<b>Fixed Items:</b>		
N/A		
<b>Fire Suppression:</b>		
Fire suppression system		211000
<b>Plumbing:</b>		
N/A		
<b>HVAC:</b>		
Supply/return air system		Div. 23
Independent temperature control		230923
<b>Electrical:</b>		
Fluorescent lighting		265100
illumination level: See Table 8600-5		
Single level switching		262726
4 duplex receptacles		262726
Double duplex receptacle adjacent to data port		262726
<b>Communications:</b>		
1 data port		271513
Clock		275313
Central sound system		275123
<b>Electronic Safety and Security:</b>		
Life safety devices per code		283111
<b>Miscellaneous:</b>		
N/A		

**NOTES:**

1. Finishes/Features: Refer to Chapter 9 for specification references.

**07.1100 CLINICAL HEALTH CARE SERVICES  
07.0303 NURSE ASSISTING  
07.0904 MEDICAL ASSISTANT  
CT-P4-1**

CHAPTER 6: CAREER-TECHNICAL SCHOOL

<p><b><u>PROGRAM DESCRIPTION:</u></b>  <b><i>MA: A combination of subject matter and experiences designed to prepare a person to perform functions and follow procedures concerned with the diagnosis and treatment of patients under the supervision of a physician in a physician's office or clinic. Instruction covers physical examinations, laboratory tests, infection control and hazard material management, quality assurance, medical ethics, patient education, medical emergencies, general office procedures, insurance, and medications.</i></b>  <b><u>CHCS:</u></b> Combined with specialized competencies, and utilizing business and industry technical standards within a math, science, ELA, social studies and technology framework. Involves changing the health status of a patient/client over time through performance of tests or evaluations to identify the presence or absence of illness or injury that creates a picture of the health status of an individual at a single point of time.  <b><u>NA:</u></b> A combination of subject matter and experiences designed to prepare a person to perform routine tasks involved in the care of individuals receiving nursing service under the supervision of a nurse.</p> <p><b>Program Type:</b> 4</p> <p><b>Size Requirements:</b> 1,200 SF Lab</p> <p>Lab Requirements:</p> <table border="0"> <tr> <td><b><u>FINISHES:</u></b></td> <td align="right">Spec.</td> </tr> <tr> <td><b>Flooring:</b></td> <td align="right"><b><u>Ref #</u></b></td> </tr> <tr> <td>ET, sheet vinyl, or linoleum</td> <td align="right">096500</td> </tr> <tr> <td></td> <td align="right">096516</td> </tr> <tr> <td><b>Base:</b></td> <td></td> </tr> <tr> <td>Resilient</td> <td align="right">096500</td> </tr> <tr> <td><b>Ceiling:</b></td> <td></td> </tr> <tr> <td>Suspended acoustical</td> <td align="right">095113</td> </tr> <tr> <td><b>Walls:</b></td> <td></td> </tr> <tr> <td>Painted concrete masonry units</td> <td align="right">042000/ 099100</td> </tr> </table>	<b><u>FINISHES:</u></b>	Spec.	<b>Flooring:</b>	<b><u>Ref #</u></b>	ET, sheet vinyl, or linoleum	096500		096516	<b>Base:</b>		Resilient	096500	<b>Ceiling:</b>		Suspended acoustical	095113	<b>Walls:</b>		Painted concrete masonry units	042000/ 099100	<p align="right">Spec. <b><u>Ref.#</u></b></p> <p><b><u>FEATURES<sup>1</sup>:</u></b>  <b><u>Fixed Items:</u></b></p> <table border="0"> <tr> <td><b>24' of chalk/marker board or tack board or tackable wall surface</b></td> <td align="right">101100</td> </tr> <tr> <td>40' of sink base cabinets w/3 sinks</td> <td align="right">123550</td> </tr> <tr> <td>40' of wall cabinets</td> <td align="right">123550</td> </tr> <tr> <td>10' of reception counter</td> <td align="right">123550</td> </tr> <tr> <td>Pencil sharpener support (<i>optional</i>)</td> <td align="right">062000</td> </tr> <tr> <td>Windows with integral blinds</td> <td align="right">085113</td> </tr> <tr> <td>(3) Paper towel dispensers</td> <td align="right">102813</td> </tr> <tr> <td>Projection screen, 6'x8'</td> <td align="right">115213</td> </tr> </table> <p><b><u>Fire Suppression:</u></b></p> <table border="0"> <tr> <td>Fire suppression system</td> <td align="right">211000</td> </tr> </table> <p><b><u>Plumbing:</u></b></p> <table border="0"> <tr> <td>Plumbing connections</td> <td align="right">221116/221119/224000</td> </tr> </table> <p><b><u>HVAC:</u></b></p> <table border="0"> <tr> <td>Supply/return air system</td> <td align="right">Div. 23</td> </tr> <tr> <td>Independent temperature control</td> <td align="right">230923</td> </tr> </table> <p><b><u>Electrical:</u></b></p> <table border="0"> <tr> <td>Fluorescent lighting</td> <td align="right">265100</td> </tr> <tr> <td>    Illumination level: See Table 8600-5</td> <td></td> </tr> <tr> <td>Multilevel switching</td> <td align="right">262726</td> </tr> <tr> <td>20 duplex receptacles (minimum)</td> <td align="right">262726</td> </tr> <tr> <td>Double duplex receptacle adjacent to each data and video port</td> <td align="right">262726</td> </tr> </table> <p><b><u>Communications:</u></b></p> <table border="0"> <tr> <td>1 video port and video display device</td> <td align="right">271533/271543/274119</td> </tr> <tr> <td>1 voice port and phone</td> <td align="right">271513/273 <b>123</b></td> </tr> <tr> <td>1 data port near teacher workstation</td> <td align="right">271513</td> </tr> <tr> <td>8 data ports</td> <td align="right">271513</td> </tr> <tr> <td>Clock</td> <td align="right">275313</td> </tr> <tr> <td>Central sound system</td> <td align="right">275123</td> </tr> <tr> <td>Sound reinforcement system</td> <td align="right">275127</td> </tr> </table> <p><b><u>Electronic Safety and Security:</u></b></p> <table border="0"> <tr> <td>Life safety devices per code</td> <td align="right">283111</td> </tr> </table> <p><b><u>Miscellaneous:</u></b></p> <p align="center"><b><i>Pencil sharpener (optional)</i></b></p> <p><b><u>LOOSE FURNISHINGS:</u></b></p> <table border="0"> <tr> <td>(12) Two-person work tables</td> <td></td> </tr> <tr> <td>(24) Student chairs/stools</td> <td></td> </tr> <tr> <td>(1) Teacher station &amp; chair</td> <td></td> </tr> <tr> <td>Wastebasket</td> <td></td> </tr> </table>	<b>24' of chalk/marker board or tack board or tackable wall surface</b>	101100	40' of sink base cabinets w/3 sinks	123550	40' of wall cabinets	123550	10' of reception counter	123550	Pencil sharpener support ( <i>optional</i> )	062000	Windows with integral blinds	085113	(3) Paper towel dispensers	102813	Projection screen, 6'x8'	115213	Fire suppression system	211000	Plumbing connections	221116/221119/224000	Supply/return air system	Div. 23	Independent temperature control	230923	Fluorescent lighting	265100	Illumination level: See Table 8600-5		Multilevel switching	262726	20 duplex receptacles (minimum)	262726	Double duplex receptacle adjacent to each data and video port	262726	1 video port and video display device	271533/271543/274119	1 voice port and phone	271513/273 <b>123</b>	1 data port near teacher workstation	271513	8 data ports	271513	Clock	275313	Central sound system	275123	Sound reinforcement system	275127	Life safety devices per code	283111	(12) Two-person work tables		(24) Student chairs/stools		(1) Teacher station & chair		Wastebasket	
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Central sound system	275123																																																																														
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**NOTES:**

1. Finishes/Features: Refer to Chapter 9 for specification references.

**07.1100 CLINICAL HEALTH CARE SERVICES**  
**07.0303 NURSE ASSISTING**  
**07.0904 MEDICAL ASSISTANT**  
**Training Restroom**

CHAPTER 6: CAREER-TECHNICAL SCHOOL

		Spec. Ref.#
<b>Program Type:</b>	4	
<b>Size Requirements:</b>	120 SF	
<b>Requirements:</b>		
<u>FINISHES:</u>	Spec. Ref #	
<u>Flooring:</u>		
Rubber, linoleum, ET, or sheet vinyl	096500 096516	
Option: ceramic mosaic tile, porcelain tile base, or resinous flooring	093000 096723	
<u>Base:</u>		
Resilient	096500	
Option: ceramic mosaic tile base, porcelain tile base, or resinous flooring	093000 096723	
<u>Ceiling:</u>		
Suspended acoustical	095113	
<u>Walls:</u>		
Painted concrete masonry units	042000/ 099100	
<u>LOOSE FURNISHINGS:</u>		
Wastebasket		
<u>ENVIRONMENTAL CONSIDERATIONS:</u>		
▪ Wall minimum STC 48		
▪ Ceiling minimum CAC 35, NRC 0.70		
		<u>FEATURES<sup>1</sup>:</u>
		<u>Fixed Items:</u>
		3' vanity with sink 123550
		Paper towel dispenser 102813
		Soap dispenser 102813
		36" and 42" grab bars 102813
		16"x24" mirror 102813
		Toilet paper holder 102813
		Bathtub grab bars 102813
		Bath curtain rod 102813
		<u>Fire Suppression:</u>
		Fire suppression system 211000
		<u>Plumbing:</u>
		Tank-type toilet 224000
		Residential bathtub 224000
		Plumbing connections 221116/221119/224000
		<u>HVAC:</u>
		Exhaust air system Div. 23
		Supplemental heat as required Div. 23
		<u>Electrical:</u>
		Fluorescent lighting 265100
		Illumination level: See Table 8600-5
		Single level switching 262726
		2 duplex receptacles 262726
		<u>Communications:</u>
		Central sound system 275123
		<u>Electronic Safety and Security:</u>
		Life safety devices per code 283111
		<u>Miscellaneous:</u>
		N/A

NOTES:

1. Finishes/Features: Refer to Chapter 9 for specification references.

**07.1100 CLINICAL HEALTH CARE SERVICES  
07.0303 NURSE ASSISTING  
07.0904 MEDICAL ASSISTANT  
Laundry Room**

CHAPTER 6: CAREER-TECHNICAL SCHOOL

<b>Program Type:</b> 4		<b>FEATURES<sup>1</sup>:</b>	Spec.
<b>Size Requirements:</b> 120 SF		<b>Fixed Items:</b>	<b>Ref.#</b>
<b>Requirements:</b>		6' of base cabinets	123550
		6' of adjustable shelving	062000
<b>FINISHES:</b>	<b>Spec. Ref #</b>	<b>Fire Suppression:</b>	
Flooring:		Fire suppression system	211000
ET, sheet vinyl, or linoleum	096500	<b>Plumbing:</b>	
	096516	Plumbing connections	221116/221119/224000
Base:		Washer/dryer connections	224000
Resilient	096500	<b>HVAC:</b>	
Ceiling:		Exhaust air system	Div. 23
Suspended acoustical	095113	Supplemental heat as required	Div. 23
Walls:		Dryer vent system	Div. 23
Painted concrete masonry units	042000/ 099100	<b>Electrical:</b>	
<b>LOOSE FURNISHINGS:</b>		Fluorescent lighting	265100
Clothes washer		Illumination level: See Table 8600-5	
Electric clothes dryer		Single level switching	262726
Wastebasket		4 duplex receptacles	262726
<b>ENVIRONMENTAL CONSIDERATIONS:</b>		<b>Communications:</b>	
▪ Wall minimum STC 45		Clock	275313
▪ Ceiling minimum CAC 35, NRC 0.70		Central sound system	275123
		<b>Electronic Safety and Security:</b>	
		Life safety devices per code	283111
		<b>Miscellaneous:</b>	
		N/A	

**NOTES:**

1. Finishes/Features: Refer to Chapter 9 for specification references.

**17.2602 COSMETOLOGY  
CT-P4-1**

CHAPTER 6: CAREER-TECHNICAL SCHOOL

<p><b><u>PROGRAM DESCRIPTION:</u></b> Utilizing business and industry technical standards, math, science, ELA, social studies and technology within a business process framework. Instruction includes a variety of beauty treatments including care and beautification of the hair, complexion, hands, and feet.</p> <p><b>Program Type:</b> 4</p> <p><b>Size Requirements:</b> 1,600 SF Lab</p> <p><b>Lab Requirements:</b></p> <p><b><u>FINISHES:</u></b></p> <p>Flooring: ET, sheet vinyl, or linoleum</p> <p>Base: Resilient</p> <p>Ceiling: Suspended acoustical</p> <p>Walls: Painted concrete masonry units</p> <p><b><u>LOOSE FURNISHINGS:</u></b> Portable demonstration table (8'x8') Coat rack Wastebasket</p>	<p style="text-align: right;">Spec. <u>Ref.#</u></p> <p><b><u>FEATURES<sup>1</sup>:</u></b></p> <p><b><u>Fixed Items:</u></b> 8' of tack board 101100 <b>24' of base and wall cabinets</b> 123550 16' of reception counter 123550 8' of adjustable display shelving 062000 Pencil sharpener support (<i>optional</i>) 062000 Windows with integral blinds 085113 (24) Student hair stations 123550 (base cabinet, countertop, mirror, styling chair)</p> <p><b><u>Fire Suppression:</u></b> Fire suppression system 211000</p> <p><b><u>Plumbing:</u></b> 6 Hair washing sinks 224000 Plumbing connections 221116/221119/224000</p> <p><b><u>HVAC:</u></b> Supply/return air system Div. 23 Independent temperature control 230923 Specialized ventilation for pedicure odors Div. 23</p> <p><b><u>Electrical:</u></b> Fluorescent lighting 265100 Illumination level: See Table 8600-5 Multilevel switching 262726 40 duplex receptacles (minimum) 262726 Double duplex receptacle adjacent to each data and video port 262726</p> <p><b><u>Communications:</u></b> 1 video port and video display device 271533/271543/274119 1 voice port and phone 271513/<b>273123</b> 8 data ports 271513 Clock 275313 Central sound system 275123 Sound reinforcement system 275127</p> <p><b><u>Electronic Safety and Security:</u></b> Life safety devices per code 283111</p> <p><b><u>Miscellaneous:</u></b> <b>Pencil sharpener (optional)</b></p>
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**NOTES:**

1. Finishes/Features: Refer to Chapter 9 for specification references.

**17.2602 COSMETOLOGY****CHAPTER 6: CAREER-TECHNICAL SCHOOL****Dispensary**

		Spec. Ref.#
<b>Program Type:</b>	4	
<b>Size Requirements:</b>	175 SF	
<b>Requirements:</b>		
<u>FINISHES:</u>	Spec. Ref #	
Flooring:		
ET, sheet vinyl, or linoleum	096500 096516	
Base:		
Resilient	096500	
Ceiling:		
Suspended acoustical	095113	
Walls:		
Painted concrete masonry units	042000/ 099100	
<u>LOOSE FURNISHINGS:</u>		
Wastebasket		
<u>ENVIRONMENTAL CONSIDERATIONS:</u>		
▪ Wall minimum STC 45		
▪ Ceiling minimum CAC 35, NRC 0.70		
		<b>FEATURES<sup>1</sup>:</b>
		<u>Fixed Items:</u>
		27' lockable cabinets 123550
		<u>Fire Suppression:</u>
		Fire suppression system 211000
		<u>Plumbing:</u>
		N/A
		<u>HVAC:</u>
		Supply/return air system Div. 23
		Independent ventilation Div. 23
		<u>Electrical:</u>
		Fluorescent lighting 265100
		Illumination level: See Table 8600-5
		Single level switching 262726
		4 duplex receptacles 262726
		<u>Communications:</u>
		Clock 275313
		Central sound system 275123
		<u>Electronic Safety and Security:</u>
		Life safety devices per code 283111
		<u>Miscellaneous:</u>
		N/A

**NOTES:**

1. Finishes/Features: Refer to Chapter 9 for specification references.



**17.2602 COSMETOLOGY**

**Facial Room**

CHAPTER 6: CAREER-TECHNICAL SCHOOL

<b>Program Type:</b> 4		<b>FEATURES<sup>1</sup>:</b>	Spec.
<b>Size Requirements:</b> 200 SF		<b>Fixed Items:</b>	<b>Ref.#</b>
<b>Requirements:</b>		4' of base cabinets w/1 sink	123550
		Paper towel dispenser	102813
<b>FINISHES:</b>		<b>Fire Suppression:</b>	
<b>Flooring:</b>		Fire suppression system	211000
ET, sheet vinyl, or linoleum		<b>Plumbing:</b>	
Spec. Ref #		Plumbing connections	
096500		221116/221119/224000	
096516		<b>HVAC:</b>	
<b>Base:</b>		Supply/return air system	Div. 23
Resilient		Independent ventilation	Div. 23
<b>Ceiling:</b>		Independent temperature control	230923
Suspended acoustical		<b>Electrical:</b>	
095113		Fluorescent lighting	265100
<b>Walls:</b>		Illumination level: See Table 8600-5	
Painted concrete masonry units		Single level switching	262726
042000/ 099100		4 duplex receptacles	262726
<b>LOOSE FURNISHINGS:</b>		<b>Communications:</b>	
Wastebasket		Clock	275313
		Central sound system	275123
<b>ENVIRONMENTAL CONSIDERATIONS:</b>		<b>Electronic Safety and Security:</b>	
▪ Wall minimum STC 40		Life safety devices per code	283111
▪ Ceiling minimum CAC 35, NRC 0.70		<b>Miscellaneous:</b>	
		N/A	

**NOTES:**

1. Finishes/Features: Refer to Chapter 9 for specification references.

**17.2602 COSMETOLOGY**  
**Manicure Room**

## CHAPTER 6: CAREER-TECHNICAL SCHOOL

		Spec. Ref.#
<b>Program Type:</b>	4	
<b>Size Requirements:</b>	200 SF	
<b>Requirements:</b>		
<u>FINISHES:</u>	Spec. Ref #	
Flooring:		
ET, sheet vinyl, or linoleum	096500 096516	
Base:		
Resilient	096500	
Ceiling:		
Suspended acoustical	095113	
Walls:		
Painted concrete masonry units	042000/ 099100	
<u>LOOSE FURNISHINGS:</u>		
Wastebasket		
<u>ENVIRONMENTAL CONSIDERATIONS:</u>		
▪ Wall minimum STC 45		
▪ Ceiling minimum CAC 35, NRC 0.70		
		<b>FEATURES<sup>1</sup>:</b>
		<u>Fixed Items:</u>
		4' of base cabinets w/1 sink 123550
		Paper towel dispenser 102813
		<u>Fire Suppression:</u>
		Fire suppression system 211000
		<u>Plumbing:</u>
		Plumbing connections 221116/221119/224000
		<u>HVAC:</u>
		Supply/return air system Div. 23
		Independent ventilation Div. 23
		Independent temperature control 230923
		<u>Electrical:</u>
		Fluorescent lighting 265100
		Illumination level: See Table 8600-5
		Single level switching 262726
		4 duplex receptacles 262726
		<u>Communications:</u>
		Clock 275313
		Central sound system 275123
		<u>Electronic Safety and Security:</u>
		Life safety devices per code 283111
		<u>Miscellaneous:</u>
		N/A

NOTES:

1. Finishes/Features: Refer to Chapter 9 for specification references.



**33.0005 CULINARY AND FOOD SERVICE OPERATIONS  
CT-P4-1**

CHAPTER 6: CAREER-TECHNICAL SCHOOL

<p><b><u>PROGRAM DESCRIPTION:</u></b> Educational programs in Culinary and Food Service Operations prepare learners for careers in the art and science of food preparation and presentation.</p> <p><b>Program Type:</b> 4</p> <p><b>Size Requirements:</b> 1,800 SF Lab</p> <p><b>Lab Requirements:</b></p> <p><b><u>FINISHES:</u></b> Flooring: Quarry tile</p> <p>Base: Quarry tile base</p> <p>Ceiling: Cleanable, suspended acoustical</p> <p>Walls: Epoxy painted concrete masonry units Option: ceramic wall tile or latex paint</p> <p><b><u>LOOSE FURNISHINGS:</u></b> Wastebasket</p>	<p style="text-align: right;">Spec. Ref.#</p> <p><b><u>FEATURES<sup>1</sup>:</u></b> <b><u>Fixed Items:</u></b> 8' of tack board Food service equipment (for new construction only) (3) Paper towel dispensers</p> <p><b><u>Fire Suppression:</u></b> Fire suppression system</p> <p><b><u>Plumbing:</u></b> Plumbing connections Connections to food service eqpt Gas connections Hand washing lavatory Quick release gas connections Master gas shut-off valve</p> <p><b><u>HVAC:</u></b> Supply/return air system Independent temperature control Kitchen canopy exhaust system</p> <p><b><u>Electrical:</u></b> Fluorescent lighting Illumination level: See Table 8600-6 Single level switching 10 duplex receptacles (minimum) Double duplex receptacle adjacent to each data and video port Connections for food service eqpt Means of egress lighting per code 220V service</p> <p><b><u>Communications:</u></b> 1 video port and video display device 1 voice port and phone 4 data ports Clock Central sound system Sound reinforcement system</p> <p><b><u>Electronic Safety and Security:</u></b> Life safety devices per code</p> <p><b><u>Miscellaneous:</u></b> N/A</p>
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**NOTES:**

1. Finishes/Features: Refer to Chapter 9 for specification references.

**33.0005 CULINARY AND FOOD SERVICE OPERATIONS**

CHAPTER 6: CAREER-TECHNICAL SCHOOL

**Restaurant**

		Spec.	Ref.#
<b>Program Type:</b>	4		
<b>Size Requirements:</b>	1,500 SF		
<b>Requirements:</b>			
<u>FINISHES:</u>		<u>Spec.</u>	<u>Ref #</u>
Flooring:			
Carpet		096816	
Option: ET, sheet vinyl, or linoleum		096500 096516	
Base:			
Resilient		096500	
Ceiling:			
Suspended acoustical		095113	
Walls:			
Painted concrete masonry units		042000/ 099100	
<u>LOOSE FURNISHINGS:</u>			
Wastebasket			
Tables and chairs for 24 students			
<u>ENVIRONMENTAL CONSIDERATIONS:</u>			
• <b>Required: View glass – minimum 5% without daylighting design; minimum 3% with daylighting design.</b>			
<b>Recommended: Daylighting design with glazing area determined by design solution.</b>			
• Environmental sound control - wall <b>only</b> minimum STC <b>45</b> ceiling minimum CAC 35, NRC 0.70			
			<u>FEATURES<sup>1</sup>:</u>
			<u>Fixed Items:</u>
			6' of base cabinets 123550
			6' of cashier's station 123550
			Interior window 088000/081113
			Projection screen, 6'x8' 115213
			<u>Fire Suppression:</u>
			Fire suppression system 211000
			<u>Plumbing:</u>
			N/A
			<u>HVAC:</u>
			Supply/return air system Div. 23
			Independent temperature control 230923
			<u>Electrical:</u>
			Fluorescent lighting 265100
			Illumination level: See Table 8600-6
			Multilevel switching 262726
			Incandescent can lighting around perimeter of room 265100
			4 duplex receptacles 262726
			Double duplex receptacle adjacent to each data port 262726
			<u>Communications:</u>
			1 voice port and phone 271513/ <b>273123</b>
			2 data ports 271513
			Clock 275313
			Central sound system 275123
			<u>Electronic Safety and Security:</u>
			Life safety devices per code 283111
			<u>Miscellaneous:</u>
			N/A

NOTES:

1. Finishes/Features: Refer to Chapter 9 for specification references.

**33.0005 CULINARY AND FOOD SERVICE OPERATIONS**

**Dry Storage**

CHAPTER 6: CAREER-TECHNICAL SCHOOL

		Spec. Ref.#
<b>Program Type:</b>	4	
<b>Size Requirements:</b>	150 SF	
<b>Requirements:</b>		
	Spec. Ref #	
<b><u>FINISHES:</u></b>		
<b>Flooring:</b>		
Linoleum, ET, or sheet vinyl	096500	
Option: Quarry tile	093000	
	096516	
<b>Base:</b>		
Resilient base	096500	
Option: Quarry tile	093000	
<b>Ceiling:</b>		
Cleanable, suspended, acoustical	095113	
<b>Walls:</b>		
Epoxy-painted concrete masonry units	042000/099100	
Option: Ceramic wall tile	093000	
or latex paint	099100	
<b><u>LOOSE FURNISHINGS:</u></b>		
20' Commercial grade kitchen shelving		
<b><u>ENVIRONMENTAL CONSIDERATIONS:</u></b>		
<ul style="list-style-type: none"> <li>• Continuous conditioning of air</li> <li>• Cleanable building surfaces</li> </ul>		
<b><u>FEATURES<sup>1</sup>:</u></b>		
<b><u>Fixed Items:</u></b>		
N/A		
<b><u>Fire Suppression:</u></b>		
Fire suppression system		211000
<b><u>Plumbing:</u></b>		
N/A		
<b><u>HVAC:</u></b>		
Exhaust air system		Div. 23
Supply/return air system		Div. 23
<b><u>Electrical:</u></b>		
Single level switching		262726
Fluorescent lighting		265100
Illumination level: See Table 8600-6		
1 duplex receptacle		262726
<b><u>Communications:</u></b>		
N/A		
<b><u>Electronic Safety and Security:</u></b>		
Life safety devices per code		283111
<b><u>Miscellaneous:</u></b>		
N/A		

**NOTES:**

1. Finishes/Features: Refer to Chapter 9 for specification references.

**07.0101 DENTAL ASSISTANT  
CT-P4-1**

CHAPTER 6: CAREER-TECHNICAL SCHOOL

<b><u>PROGRAM DESCRIPTION:</u></b>	Utilizing business and industry technical standards, math, science, ELA, social studies and technology within a business process framework. Instruction includes concepts, subject matter, and laboratory experience to assist the dentist in the dental operator, clerical functions, and selected dental laboratory work.	<b><u>FEATURES<sup>1</sup>:</u></b>	Spec.
<b>Program Type:</b>	4	<b><u>Fixed Items:</u></b>	<b><u>Ref.#</u></b>
<b>Size Requirements:</b>	1,500 SF Lab	<b>24' of chalk/marker board, tack board, or tackable wall surface</b> 101100 40' of sink base cabinets w/6 sinks and natural gas 123550 40' of wall cabinets 123550 10' of reception counter 123550 Pencil sharpener support ( <i>optional</i> ) 062000 Windows with integral blinds 085113 (6) Paper towel dispensers 102813 Projection screen, 6'x8' 115213	
<b>Lab Requirements:</b>		<b><u>Fire Suppression:</u></b>	
<b><u>FINISHES:</u></b>		Fire suppression system 211000	
Flooring:	Spec. <u>Ref #</u>	<b><u>Plumbing:</u></b>	
ET, sheet vinyl, or linoleum	096500 096516	Plumbing connections 221116/221119/224000	
Base:		Natural gas connections 226313 Master gas shut-off valve 226313 Safety shower/eye wash 224000	
Resilient	096500	<b><u>HVAC:</u></b>	
Ceiling:		Supply/return air system Div. 23 Independent temperature control 230923 Localized ventilation for specific lab-produced fumes Div. 23	
Suspended acoustical	095113	<b><u>Electrical:</u></b>	
Walls:		Fluorescent lighting 265100 Illumination level: See Table 8600-5 Multilevel switching 262726 30 duplex receptacles (minimum) 262726 Double duplex receptacle adjacent to each data and video port 262726	
Painted concrete masonry units	042000/099100	<b><u>Communications:</u></b>	
<b><u>LOOSE FURNISHINGS:</u></b>		1 video port and video display device 271533/271543/274119 1 voice port and phone 271513/ <b>273123</b> 8 data ports 271513 Clock 275313 Central sound system 275123 Sound reinforcement system 275127	
(6) 4-person epoxy-top student tables w/electric and gas		<b><u>Electronic Safety and Security:</u></b>	
(24) Student chairs/stools		Life safety devices per code 283111	
(1) Teacher station & chair		<b><u>Miscellaneous:</u></b>	
Wastebasket		<b>Pencil sharpener (<i>optional</i>)</b>	

**NOTES:**

1. Finishes/Features: Refer to Chapter 9 for specification references.



**07.0101 DENTAL ASSISTANT  
Darkroom**

CHAPTER 6: CAREER-TECHNICAL SCHOOL

<b>Program Type:</b> 4		<b>FEATURES<sup>1</sup>:</b>	Spec.
<b>Size Requirements:</b> 80 SF		<b>Fixed Items:</b>	<b>Ref.#</b>
		10' of base cabinets w/1 sink	123550
		Paper towel dispenser	102813
<b>Requirements:</b>		<b>Fire Suppression:</b>	
		Fire suppression system	211000
<b>FINISHES:</b>		<b>Plumbing:</b>	
<b>Flooring:</b>		Plumbing connections	221116/221119/224000
ET, sheet vinyl, linoleum, 096500		<b>HVAC:</b>	
polished concrete finishing, 096516		Supply/return air system	Div. 23
or colored concrete finishing 033510		Independent temperature control	230923
033519		<b>Electrical:</b>	
<b>Base:</b>		Fluorescent lighting	265100
Resilient 096500		Illumination level: See Table 8600-5	
<b>Ceiling:</b>		Single level switching	262726
Suspended acoustical 095113		4 duplex receptacles	262726
<b>Walls:</b>		Dark room safelight	265100
Painted concrete masonry units 042000/		<b>Communications:</b>	
099100		Central sound system	275123
<b>LOOSE FURNISHINGS:</b>		Clock	275313
Wastebasket		<b>Electronic Safety and Security:</b>	
		Life safety devices per code	283111
		<b>Miscellaneous:</b>	
		N/A	
<b>ENVIRONMENTAL CONSIDERATIONS:</b>			
<ul style="list-style-type: none"> <li>▪ Wall minimum STC 45</li> <li>▪ Ceiling minimum CAC 35, NRC 0.70</li> </ul>			

**NOTES:**

1. Finishes/Features: Refer to Chapter 9 for specification references.

**07.4820 DIAGNOSTIC PATHWAY  
CT-P4-1**

CHAPTER 6: CAREER-TECHNICAL SCHOOL

<p><b><u>PROGRAM DESCRIPTION:</u></b> A clustered program utilizing business and industry technical standards, math, science, ELA, social studies and technology within a business process framework. Instruction includes concepts, subject matter, and experience in health careers that focus on diagnostic procedures to determine status of body functions/systems, cause and nature of diseases and disorders.</p> <p><b>Program Type:</b> 4</p> <p><b>Size Requirements:</b> 1,200 SF Lab</p> <p>Lab Requirements:</p> <p><b><u>FINISHES:</u></b> Flooring: ET, sheet vinyl, or linoleum</p> <p>Base: Resilient</p> <p>Ceiling: Suspended acoustical</p> <p>Walls: Painted concrete masonry units</p> <p><b><u>LOOSE FURNISHINGS:</u></b> (12) Two-person work tables (24) Student chairs/stools (1) Teacher station &amp; chair Wastebasket</p>	<p style="text-align: right;">Spec. <u>Ref.#</u></p> <p><b><u>FEATURES<sup>1</sup>:</u></b> <b><u>Fixed Items:</u></b> <b>24' of chalk/marker board, tack board, or tackable wall surface</b> 101100 20' of sink base cabinets w/1 sink 123550 20' of wall cabinets 123550 10' of reception counter 123550 Pencil sharpener support (<b>support</b>) 062000 Windows with integral blinds 085113 (1) Paper towel dispenser 102813 Projection screen, 6'x8' 115213</p> <p><b><u>Fire Suppression:</u></b> Fire suppression system 211000</p> <p><b><u>Plumbing:</u></b> Plumbing connections 221116/221119/224000 Safety shower/eyewash 224500</p> <p><b><u>HVAC:</u></b> Supply/return air system Div. 23 Independent temperature control 230923</p> <p><b><u>Electrical:</u></b> Fluorescent lighting 265100 Illumination level: See Table 8600-5 Multilevel switching 262726 20 duplex receptacles (minimum) 262726 Double duplex receptacle adjacent to each data and video port 262726</p> <p><b><u>Communications:</u></b> 1 video port and video display device 271533/271543/274119 1 voice port and phone 271513/<b>273123</b> 1 data port near teacher workstation 271513 8 data ports 271513 Clock 275313 Central sound system 275123 Sound reinforcement system 275127</p> <p><b><u>Electronic Safety and Security:</u></b> Life safety devices per code 283111</p> <p><b><u>Miscellaneous:</u></b> <b>Pencil sharpener (support)</b></p>
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**NOTES:**

1. Finishes/Features: Refer to Chapter 9 for specification references.

**07.4820 DIAGNOSTIC PATHWAY  
Exam Room(s)**

CHAPTER 6: CAREER-TECHNICAL SCHOOL

<b>Program Type:</b> 4	<b>FEATURES<sup>1</sup>:</b>	Spec.
<b>Size Requirements:</b> 200 SF	<u>Fixed Items:</u>	<u>Ref.#</u>
<b>Requirements:</b>	4' of base cabinets w/1 sink per room	123550
<u>FINISHES:</u>	Paper towel dispenser	102813
Flooring:	<u>Fire Suppression:</u>	
ET, sheet vinyl, or linoleum	Fire suppression system	211000
Base:	<u>Plumbing:</u>	
Resilient	Plumbing connections	221116/221119/224000
Ceiling:	<u>HVAC:</u>	
Suspended acoustical	Supply/return air system	Div. 23
Walls:	Independent temperature control	230923
Painted concrete masonry units	<u>Electrical:</u>	
042000/ 099100	Fluorescent lighting	265100
<u>LOOSE FURNISHINGS:</u>	Illumination level: See Table 8600-5	
(1) stool per room	Single level switching	262726
(1) wastebasket per room	4 duplex receptacles per room	262726
<u>ENVIRONMENTAL CONSIDERATIONS:</u>	Double duplex receptacle adjacent to	262726
• <b>Required: View glass – minimum 5%</b>	each data port	
<b>without daylighting design; minimum 3%</b>	<u>Communications:</u>	
<b>with daylighting design.</b>	1 data port per room	271513
<b>Recommended: Daylighting design with</b>	1 clock per room	275313
<b>glazing area determined by design</b>	Central sound system	275123
<b>solution.</b>	<u>Electronic Safety and Security:</u>	
• Environmental sound control -	Life safety devices per code	283111
wall <b>only</b> minimum STC 45	<u>Miscellaneous:</u>	
ceiling minimum CAC 35, NRC 0.70	N/A	

NOTES:

1. Finishes/Features: Refer to Chapter 9 for specification references.

**17.2801 FIRE FIGHTER TRAINING  
CT-P4-1**

CHAPTER 6: CAREER-TECHNICAL SCHOOL

<p><b><u>PROGRAM DESCRIPTION:</u></b> Specialized classroom and practical experiences concerned with the preparation of paid, full-time firefighters.</p> <p><b>Program Type:</b> 4</p> <p><b>Size Requirements:</b> 1,500 SF Lab</p> <p><b>Lab Requirements:</b></p> <table border="0"> <tr> <td style="width: 30%;"><b><u>FINISHES:</u></b></td> <td style="text-align: right;">Spec.</td> </tr> <tr> <td>Flooring:</td> <td style="text-align: right;"><b><u>Ref #</u></b></td> </tr> <tr> <td>    Carpet</td> <td style="text-align: right;">096816</td> </tr> <tr> <td>    Option: ET, sheet vinyl, or linoleum</td> <td style="text-align: right;">096500</td> </tr> <tr> <td></td> <td style="text-align: right;">096516</td> </tr> <tr> <td>Base:</td> <td></td> </tr> <tr> <td>    Resilient</td> <td style="text-align: right;">096500</td> </tr> <tr> <td>Ceiling:</td> <td></td> </tr> <tr> <td>    Suspended acoustical</td> <td style="text-align: right;">095113</td> </tr> <tr> <td>Walls:</td> <td></td> </tr> <tr> <td>    Painted concrete masonry units</td> <td style="text-align: right;">042000/ 099100</td> </tr> <tr> <td><b><u>LOOSE FURNISHINGS:</u></b></td> <td></td> </tr> <tr> <td>    (12) Two-person work tables</td> <td></td> </tr> <tr> <td>    (24) Student chairs/stools</td> <td></td> </tr> <tr> <td>    (1) Teacher station &amp; chair</td> <td></td> </tr> <tr> <td>    Wastebasket</td> <td></td> </tr> </table>	<b><u>FINISHES:</u></b>	Spec.	Flooring:	<b><u>Ref #</u></b>	Carpet	096816	Option: ET, sheet vinyl, or linoleum	096500		096516	Base:		Resilient	096500	Ceiling:		Suspended acoustical	095113	Walls:		Painted concrete masonry units	042000/ 099100	<b><u>LOOSE FURNISHINGS:</u></b>		(12) Two-person work tables		(24) Student chairs/stools		(1) Teacher station & chair		Wastebasket		<p style="text-align: right;">Spec. <b><u>Ref.#</u></b></p> <p><b><u>FEATURES<sup>1</sup>:</u></b> <b><u>Fixed Items:</u></b></p> <p>    <b>32' of chalk/marker board, tack board, or tackable wall surface</b> 101100</p> <p>    30' of sink base cabinets w/1 sink 123550</p> <p>    30' of wall cabinets 123550</p> <p>    Pencil sharpener support (<i>optional</i>) 062000</p> <p>    Windows with integral blinds 085113</p> <p>    Paper towel dispenser 102813</p> <p>    Projection screen, 6'x8' 115213</p> <p><b><u>Fire Suppression:</u></b></p> <p>    Fire suppression system 211000</p> <p><b><u>Plumbing:</u></b></p> <p>    Plumbing connections 221116/221119/224000</p> <p><b><u>HVAC:</u></b></p> <p>    Supply/return air system Div. 23</p> <p>    Independent temperature control 230923</p> <p><b><u>Electrical:</u></b></p> <p>    Fluorescent lighting 265100</p> <p>    Illumination level: See Table 8600-5</p> <p>    Multilevel switching 262726</p> <p>    20 duplex receptacles (minimum) 262726</p> <p>    Double duplex receptacle adjacent to each data and video port 262726</p> <p><b><u>Communications:</u></b></p> <p>    1 video port 271533/271543</p> <p>    1 voice port and phone 271513/273113</p> <p>    1 data port near teacher workstation 271513</p> <p>    8 data ports 271513</p> <p>    Clock 275313</p> <p>    Central sound system 275123</p> <p>    Sound reinforcement system 275127</p> <p><b><u>Electronic Safety and Security:</u></b></p> <p>    Life safety devices per code 283111</p> <p><b><u>Miscellaneous:</u></b></p> <p>    <b>Pencil sharpener (<i>optional</i>)</b></p>
<b><u>FINISHES:</u></b>	Spec.																																
Flooring:	<b><u>Ref #</u></b>																																
Carpet	096816																																
Option: ET, sheet vinyl, or linoleum	096500																																
	096516																																
Base:																																	
Resilient	096500																																
Ceiling:																																	
Suspended acoustical	095113																																
Walls:																																	
Painted concrete masonry units	042000/ 099100																																
<b><u>LOOSE FURNISHINGS:</u></b>																																	
(12) Two-person work tables																																	
(24) Student chairs/stools																																	
(1) Teacher station & chair																																	
Wastebasket																																	

**NOTES:**

1. Finishes/Features: Refer to Chapter 9 for specification references.

**17.2801 FIRE FIGHTER TRAINING  
Weight Room**

CHAPTER 6: CAREER-TECHNICAL SCHOOL

<b>Program Type:</b> 4		<b>FEATURES<sup>1</sup>:</b>	Spec.
<b>Size Requirements:</b> 800 SF		<b>Fixed Items:</b>	<u>Ref.#</u>
		N/A	
<b>Requirements:</b>		<b>Fire Suppression:</b>	
		Fire suppression system	211000
<b>FINISHES:</b>		<b>Plumbing:</b>	
	Spec.	N/A	
	<u>Ref #</u>	<b>HVAC:</b>	
Flooring:		Supply/return air system	Div. 23
ET, sheet vinyl, or linoleum	096500	Independent temperature control	230923
Option: <b>Sealed</b> concrete	096516		
	033000	<b>Electrical:</b>	
Base:		Fluorescent lighting	265100
Resilient	096500	Illumination level: See Table 8600-5	
Ceiling:		Single level switching	262726
Suspended acoustical	095113	4 duplex receptacles	262726
Walls:		Double duplex receptacle adjacent to	
Painted concrete masonry units	042000/ 099100	data port	262726
<b>LOOSE FURNISHINGS:</b>		<b>Communications:</b>	
N/A		Clock	275313
		Central sound system	275123
<b>ENVIRONMENTAL CONSIDERATIONS:</b>		<b>Electronic Safety and Security:</b>	
<ul style="list-style-type: none"> <li>▪ Wall minimum STC 48</li> <li>▪ Ceiling minimum CAC 35, NRC 0.70</li> </ul>		Life safety devices per code	283111
		<b>Miscellaneous:</b>	
		N/A	

**NOTES:**

1. Finishes/Features: Refer to Chapter 9 for specification references.

**34.0015 MEDIA ARTS  
CT-P4-1**

CHAPTER 6: CAREER-TECHNICAL SCHOOL

<b><u>PROGRAM DESCRIPTION:</u></b>	<p>Programs that focus on the use of still and motion photography in journalism. Communications, business principles, and leadership skill development related to the industry are essential to the program. Specialization areas include journalism, photography, and digital media.</p>	Spec.
<b>Program Type:</b>	4	<u>Ref.#</u>
<b>Size Requirements:</b>	1,500 SF Lab	<b><u>FEATURES<sup>1</sup>:</u></b>
<b>Studio Requirements:</b>		<b><u>Fixed Items:</u></b>
<b><u>FINISHES:</u></b>	<u>Spec. Ref #</u>	Overhead metal pipe grid (48" o.c., both ways)
Flooring: Sheet vinyl or linoleum	096516 096500	to support studio lights & accessories 055000
Base: Resilient	096500	Cyclorama curtain & track, min. of 2 walls 116143
Ceiling: Pipe grid – 14' to bottom	116135	<b><u>Fire Suppression:</u></b>
Walls: Painted concrete masonry units	042000/ 099100	Fire suppression system 211000
Acoustical wall treatment	098000	<b><u>Plumbing:</u></b> N/A
		<b><u>HVAC:</u></b>
		Supply/return air system Div. 23
		Independent temperature control 230923
		<b><u>Electrical:</u></b>
		Fluorescent lighting 265100
		Illumination level: See Table 8600-5
		Track lighting 265100
		Multilevel switching 262726
		20 duplex receptacles 262726
		Double duplex receptacle adjacent to
		each data and video port 262726
		Emergency lighting 265100
		<b><u>Communications:</u></b>
		1 video port 271533/271543
		1 voice port and phone 271513/ <b>273123</b>
		2 data ports 271513
		Clock 275313
		Cable management system
		Special A/V Cabling Conveyance
		Special A/V Cabling
		<b><u>Electronic Safety and Security:</u></b>
		Life safety devices per code 283111
		<b><u>Miscellaneous:</u></b>
		N/A

**NOTES:**

1. Finishes/Features: Refer to Chapter 9 for specification references.

CHAPTER 6: CAREER-TECHNICAL SCHOOL

**34.0015 MEDIA ARTS  
CONTROL ROOM / EDIT**

		Spec. Ref.#
Program Type:	4	
Size Requirements:	450 SF	
<u>FINISHES<sup>1</sup>:</u>	Spec. Ref.#	
Flooring:		
Linoleum, ET, or sheet vinyl	096516 096500	
Base:		
Resilient base	096500	
Ceiling:		
Suspended, acoustical (9'-0" high)	095113	
Walls:		
Painted gypsum wallboard	092116/099100	
Acoustical wall treatment	098000	
<u>LOOSE FURNISHINGS:</u>		
(6) Chairs		
Wastebasket		
		<u>FEATURES:</u>
		<u>Fixed Items:</u>
		10'-20' of equipment/work surface
		6'-8' of tack board or marker board
		Window
		8' of base cabinet
		123550
		101100
		085113
		123550
		<u>Fire Suppression:</u>
		Fire suppression system
		211000
		<u>Plumbing:</u>
		N/A
		<u>HVAC:</u>
		Supply/return air system
		Independent temperature control
		Div. 23
		230923
		<u>Electrical:</u>
		Fluorescent lighting: overhead
		Illumination level: See Table 8600-5
		Dimmable incandescent task
		lighting on work surface
		265100
		Single level switching
		262726
		8 duplex receptacles
		262726
		Provisions for hard-wired equipment
		260519/260533
		Studio dimming system
		control panel
		265561
		Telecommunications Grounding
		270526/260526
		<u>Communications:</u>
		1 voice port and phone
		271513/273123
		2 video port
		271533/271543
		6 data ports
		271513
		Clock
		275313
		Central sound system
		275123
		Specialized A/V equipment
		<u>Electronic Safety and Security:</u>
		Life safety devices per code
		283111
		<u>Miscellaneous:</u>
		N/A

NOTES:

1. Finishes/Features: Refer to Chapter 9 for specification references.



**07.0603 OPTOMETRIC OCCUPATIONS**

CHAPTER 6: CAREER-TECHNICAL SCHOOL

**CT-P4-1**

<b><u>PROGRAM DESCRIPTION:</u></b>		<b>FEATURES<sup>1</sup>:</b>	Spec.
A combination of subject matter and experiences designed to train a person to prepare, assemble, and/or fit corrective lenses prescribed by a physician or optometrist. These occupations may include optical surfacing, optical finishing, optical stylist, and/or optical dispensing.		<b>Fixed Items:</b>	<b>Ref.#</b>
<b>Program Type:</b>	4	<b>24' of chalk/marker board, tack board, or tackable wall surface</b>	101100
<b>Size Requirements:</b>	1,200 SF Lab	30' of sink base cabinets w/2 sinks	123550
<b>Lab Requirements:</b>		30' of wall cabinets	123550
<b>FINISHES:</b>		Pencil sharpener support ( <i>optional</i> )	062000
<b>Flooring:</b>		Windows with integral blinds	085113
ET, sheet vinyl, or linoleum	Spec. Ref #	(2) Paper towel dispensers	102813
	096500	Projection screen, 6'x8'	115213
	096516	Fume hood	115313
<b>Base:</b>		<b>Fire Suppression:</b>	
Resilient	096500	Fire suppression system	211000
<b>Ceiling:</b>		<b>Plumbing:</b>	
Suspended acoustical	095113	Plumbing connections	221116/221119/224000
<b>Walls:</b>		12 Compressed air connections	221500
Painted concrete masonry units	042000/ 099100	Safety shower/eyewash	224000
		Master gas shut-off valve	226313
<b>LOOSE FURNISHINGS:</b>		<b>HVAC:</b>	
(6) 4-person epoxy-top student tables with electric & natural gas		Supply/return air system	Div. 23
(24) Student chairs/stools		Independent temperature control	230923
(1) Teacher station & chair		Fume hood exhaust	Div. 23
Wastebasket		<b>Electrical:</b>	
		Fluorescent lighting	265100
		Illumination level: See Table 8600-5	
		Multilevel switching	262726
		30 duplex receptacles	262726
		Double duplex receptacle adjacent to each data and video port	262726
		220V service	262726
		<b>Communications:</b>	
		1 video port and video display device	271533/271543/274119
		1 voice port and phone	271513/ <b>273123</b>
		1 data port near teacher workstation	271513
		8 data ports	271513
		Clock	275313
		Central sound system	275123
		Sound reinforcement system	275127
		Overhead projector	274119
		<b>Electronic Safety and Security:</b>	
		Life safety devices per code	283111
		<b>Miscellaneous:</b>	
		<b>Pencil sharpener (optional)</b>	

**NOTES:**

1. Finishes/Features: Refer to Chapter 9 for specification references.

**07.0603 OPTOMETRIC OCCUPATIONS  
Exam Room**

CHAPTER 6: CAREER-TECHNICAL SCHOOL

		Spec. Ref.#
<b>Program Type:</b>	4	
<b>Size Requirements:</b>	100 SF	
<b>Requirements:</b>		
<u>FINISHES:</u>	Spec. Ref #	
Flooring:		
ET, sheet vinyl, or linoleum	096500 096516	
Base:		
Resilient	096500	
Ceiling:		
Suspended acoustical	095113	
Walls:		
Painted concrete masonry units	042000/ 099100	
<u>LOOSE FURNISHINGS:</u>		
2 stools		
<u>ENVIRONMENTAL CONSIDERATIONS:</u>		
▪ Wall minimum STC 48		
▪ Ceiling minimum CAC 35, NRC 0.70		
		<b>FEATURES<sup>1</sup>:</b>
		<u>Fixed Items:</u>
		4' of base cabinets 123550
		<u>Fire Suppression:</u>
		Fire suppression system 211000
		<u>Plumbing:</u>
		N/A
		<u>HVAC:</u>
		Supply/return air system Div. 23
		Independent temperature control 230923
		<u>Electrical:</u>
		Fluorescent lighting 265100
		Illumination level: See Table 8600-5
		Single level switching 262726
		4 duplex receptacles 262726
		Double duplex receptacle adjacent to data port 262726
		<u>Communications:</u>
		1 data port 271513
		1 voice port and phone 271513/ <b>273123</b>
		1 clock 275313
		Central sound system 275123
		<u>Electronic Safety and Security:</u>
		Life safety devices per code 283111
		<u>Miscellaneous:</u>
		N/A

NOTES:

1. Finishes/Features: Refer to Chapter 9 for specification references.

**07.0994 PATIENT CARE TECHNICIAN  
CT-P4-1**

CHAPTER 6: CAREER-TECHNICAL SCHOOL

<b><u>PROGRAM DESCRIPTION:</u></b>		<b>FEATURES<sup>1</sup>:</b>		Spec.
Subject matter and laboratory experiences to provide students with the knowledge and skills in the care of patients of all ages under the direction and supervision of a registered nurse or licensed practical nurse and for advance nursing skills.		<b><u>Fixed Items:</u></b>		<b><u>Ref.#</u></b>
<b>Program Type:</b>	4	<b>16' of chalk/marker board, tack board, or tackable wall surface</b>		101100
<b>Size Requirements:</b>	1,500 SF Lab	30' of sink base cabinets w/2 sinks		123550
<b>Lab Requirements:</b>		30' of wall cabinets		123550
		10' of reception counter		123550
		Pencil sharpener support ( <i>optional</i> )		062000
		Windows with integral blinds		085113
		(2) Paper towel dispensers		102813
		Projection screen, 6'x8'		115213
		100' of cubicle track and curtains		102123
		<b><u>Fire Suppression:</u></b>		
		Fire suppression system		211000
<b><u>FINISHES:</u></b>		<b><u>Plumbing:</u></b>		
<b>Flooring:</b>		Plumbing connections		
ET, sheet vinyl, or linoleum	Spec. <b><u>Ref #</u></b>			221116/221119/224000
	096500	<b><u>HVAC:</u></b>		
	096516	Supply/return air system		Div. 23
<b>Base:</b>		Independent temperature control		230923
Resilient	096500	<b><u>Electrical:</u></b>		
<b>Ceiling:</b>		Fluorescent lighting		265100
Suspended acoustical	095113	Illumination level: See Table 8600-5		
<b>Walls:</b>		Multilevel switching		262726
Painted concrete masonry units	042000/ 099100	20 duplex receptacles (minimum)		262726
		Double duplex receptacle adjacent to each data and video port		262726
<b><u>LOOSE FURNISHINGS:</u></b>		<b><u>Communications:</u></b>		
(12) Two-person work tables		1 video port, monitor, and brackets		
(24) Student chairs/stools				271533/271543/274119
(1) Teacher station & chair		1 voice port and phone		271513/ <b>273123</b>
Wastebasket		1 data port near teacher workstation		271513
		8 data ports		271513
		Clock		275313
		Central sound system		275123
		Sound reinforcement system		275127
		Overhead projector		274119
		<b><u>Electronic Safety and Security:</u></b>		
		Life safety devices per code		283111
		<b><u>Miscellaneous:</u></b>		
		<b>Pencil sharpener (<i>optional</i>)</b>		

**NOTES:**

1. Finishes/Features: Refer to Chapter 9 for specification references.

**07.0994 PATIENT CARE TECHNICIAN  
Training Restroom**

## CHAPTER 6: CAREER-TECHNICAL SCHOOL

		Spec. Ref.#
<b>Program Type:</b>	4	
<b>Size Requirements:</b>	120 SF	
<b>Requirements:</b>		
<u>FINISHES:</u>	Spec. Ref #	
Flooring:		
Rubber, linoleum, ET, or sheet vinyl	096500 096515	123550 102813
Option: ceramic mosaic tile, porcelain tile base, or resinous flooring	093000 096723	102813 102813 102813 102813 102813
Base:		
Resilient	096500	
Option: ceramic mosaic tile base, porcelain tile base, or resinous flooring	093000 096723	
Ceiling:		
Suspended acoustical	095113	
Walls:		
Painted concrete masonry units	042000/ 099100	
<u>LOOSE FURNISHINGS:</u>		
Wastebasket		
<u>ENVIRONMENTAL CONSIDERATIONS:</u>		
▪ Wall minimum STC 48		
▪ Ceiling minimum CAC 35, NRC 0.70		
		<u>FEATURES<sup>1</sup>:</u>
		<u>Fixed Items:</u>
		3' vanity with sink 123550
		Paper towel dispenser 102813
		Soap dispenser 102813
		36" and 42" grab bars 102813
		16"x24" mirror 102813
		Toilet paper holder 102813
		Bathtub grab bars 102813
		Bath curtain rod 102813
		<u>Fire Suppression:</u>
		Fire suppression system 211000
		<u>Plumbing:</u>
		Tank-type toilet 224000
		Residential bathtub 224000
		Plumbing connections 221116/221119/224000
		<u>HVAC:</u>
		Exhaust air system Div. 23
		Supplemental heat as required Div. 23
		<u>Electrical:</u>
		Fluorescent lighting 265100
		Illumination level: See Table 8600-5
		Single level switching 262726
		2 duplex receptacles 262726
		<u>Communications:</u>
		Central sound system 275123
		<u>Electronic Safety and Security:</u>
		Life safety devices per code 283111
		<u>Miscellaneous:</u>
		N/A

NOTES:

1. Finishes/Features: Refer to Chapter 9 for specification references.

**07.0994 PATIENT CARE TECHNICIAN  
Laundry Room**

CHAPTER 6: CAREER-TECHNICAL SCHOOL

<b>Program Type:</b> 4		<b>FEATURES<sup>1</sup>:</b>	Spec. Ref.#
<b>Size Requirements:</b> 120 SF		<b>Fixed Items:</b>	
		6' of base cabinets	123550
		6' of adjustable shelving	062000
<b>Requirements:</b>		<b>Fire Suppression:</b>	
	Spec. Ref #	Fire suppression system	211000
<b>FINISHES:</b>		<b>Plumbing:</b>	
Flooring:		Plumbing connections	221116/221119/224000
ET, sheet vinyl, or linoleum	096500 096516	Washer/dryer connections	224000
Base:		<b>HVAC:</b>	
Resilient	096500	Exhaust air system	Div. 23
Ceiling:		Supplemental heat as required	Div. 23
Suspended acoustical	095113	Dryer vent system	Div. 23
Walls:		<b>Electrical:</b>	
Painted concrete masonry units	042000/ 099100	Fluorescent lighting	265100
		Illumination level: See Table 8600-5	
		Single level switching	262726
		4 duplex receptacles	262726
<b>LOOSE FURNISHINGS:</b>		<b>Communications:</b>	
Clothes washer		Clock	275313
Electric clothes dryer		Central sound system	275123
Wastebasket			
		<b>Electronic Safety and Security:</b>	
		Life safety devices per code	283111
<b>ENVIRONMENTAL CONSIDERATIONS:</b>		<b>Miscellaneous:</b>	
▪ Wall minimum STC 45		N/A	
▪ Ceiling minimum CAC 35, NRC 0.70			

**NOTES:**

1. Finishes/Features: Refer to Chapter 9 for specification references.

**34.0020 PERFORMING ARTS  
CT-P4-1**

CHAPTER 6: CAREER-TECHNICAL SCHOOL

<b><u>PROGRAM DESCRIPTION:</u></b>	<b><u>FEATURES<sup>1</sup>:</u></b>	Spec.
Programs that focus on the creation, interpretation, and performance of works that use auditory, kinesthetic, and visual phenomena to express ideas and emotions in various forms. Communications, business principles, and leadership skill development related to the industry are essential to the program. Specialization areas includes music, dance, and theater.	<b><u>Fixed Items:</u></b>	<b><u>Ref.#</u></b>
	8' of tack board	101100
	16' length of 60" high mirrors	088300
	16' of ballet bars	116615
	<b><u>Fire Suppression:</u></b>	
	Fire suppression system	211000
	<b><u>Plumbing:</u></b>	
	Drinking water cooler	224000
	<b><u>HVAC:</u></b>	
	Supply/return air system	Div. 23
	Independent temperature control	230923
	<b><u>Electrical:</u></b>	
	Fluorescent lighting	265100
	Illumination level: See Table 8600-5	
	Track lighting	265100
	Multilevel switching	262726
	10 duplex receptacles	262726
	Double duplex receptacle adjacent to each data and video port	262726
	<b><u>Communications:</u></b>	
	1 video port	271533/271543
	1 voice port and phone	271513/ <b>273123</b>
	Clock	275313
	Central sound system	275123
	Sound reinforcement system	275125
	<b><u>Electronic Safety and Security:</u></b>	
	Life safety devices per code	283111
	<b><u>Miscellaneous:</u></b>	
	N/A	
<b>Program Type: 4</b>		
<b>Size Requirements:</b>		
1,500 SF Dance/Music Room		
	Spec.	
	<b><u>Ref #</u></b>	
<b><u>FINISHES:</u></b>		
Flooring:		
Hardwood	096000	
Base:		
Resilient	096500	
Ceiling:		
Painted, exposed structure	099100	
Walls:		
Painted concrete masonry units	042000/ 099100	
Acoustical wall treatment	098000	
<b><u>LOOSE FURNISHINGS:</u></b>		
(25) Student stools/chairs		

**NOTES:**

1. Finishes/Features: Refer to Chapter 9 for specification references.

**34.0020 PERFORMING ARTS  
Practice Room**

## CHAPTER 6: CAREER-TECHNICAL SCHOOL

CHAPTER 6: CAREER-TECHNICAL SCHOOL		Spec. Ref.#	
<b>Program Type:</b>	4		
<b>Size Requirements:</b>	150 SF		
<b>Requirements:</b>			
<u>FINISHES:</u>	Spec. Ref #		
Flooring:			
ET, sheet vinyl, or linoleum	096500		
	096516		
Optional: carpet	096816		
Base:			
Resilient	096500		
Ceiling:			
Suspended acoustical	095113		
Absorptive 25%, reflective 25%, diffusive 50%			
Walls:			
Painted concrete masonry units	042000/ 099100		
Acoustical wall treatment (varies with geometry of room)	098000		
<u>LOOSE FURNISHINGS:</u>			
L1 Music Stands			
L2 Music chairs			
		<u>FEATURES<sup>1</sup>:</u>	
		<u>Fixed Items:</u>	
		N/A	
		<u>Fire Suppression:</u>	
		Fire suppression system	211000
		<u>Plumbing:</u>	
		Plumbing connections	221116/221119/224000
		<u>HVAC:</u>	
		Supply/return air system	Div. 23
		Independent temperature control	230923
		<u>Electrical:</u>	
		Fluorescent lighting	265100
		Illumination level: See Table 8600-5	
		Single level switching	262726
		4 duplex receptacles	262726
		<u>Communications:</u>	
		1 voice port and phone	271513/ <b>273123</b>
		Central sound system	275123
		Clock	275313
		<u>Electronic Safety and Security:</u>	
		Life safety devices per code	283111
		<u>Miscellaneous:</u>	
		Interior window	081113/088000

NOTES:

1. Finishes/Features: Refer to Chapter 9 for specification references.

**07.0305 SURGICAL TECHNOLOGY  
CT-P4-1**

CHAPTER 6: CAREER-TECHNICAL SCHOOL

<p><b><u>PROGRAM DESCRIPTION:</u></b> A combination of subject matter and experiences designed to prepare a person to serve as a general assistant on the surgical team in the operating unit.</p> <p><b>Program Type:</b> 4</p> <p><b>Size Requirements:</b> 1,000 SF Lab</p> <p><b>Lab Requirements:</b></p> <p><b><u>FINISHES:</u></b> Flooring: ET, sheet vinyl, or linoleum</p> <p>Base: Resilient</p> <p>Ceiling: Suspended acoustical</p> <p>Walls: Painted concrete masonry units</p> <p><b><u>LOOSE FURNISHINGS:</u></b> (12) Two-person work tables (24) Student chairs/stools (1) Teacher station &amp; chair Wastebasket</p>	<p style="text-align: right;">Spec. Ref.#</p> <p><b><u>FEATURES<sup>1</sup>:</u></b> <b><u>Fixed Items:</u></b> <b>24' chalk/marker board, tack board, or tackable wall surface</b> 101100 20' of sink base cabinets w/1 sink 123550 20' of wall cabinets 123550 Pencil sharpener support (<i>optional</i>) 062000 Windows with integral blinds 085113 Paper towel dispenser 102813 Projection screen, 6'x8' 115213</p> <p><b><u>Fire Suppression:</u></b> Fire suppression system 211000</p> <p><b><u>Plumbing:</u></b> Plumbing connections 221116/221119/224000</p> <p><b><u>HVAC:</u></b> Supply/return air system Div. 23 Independent temperature control 230923</p> <p><b><u>Electrical:</u></b> Fluorescent lighting 265100 Illumination level: See Table 8600-5 Multilevel switching 262726 10 duplex receptacles (minimum) 262726 Double duplex receptacle adjacent to each data and video port 262726</p> <p><b><u>Communications:</u></b> 1 video port and video display device 271533/271543/274119 1 voice port and phone 271513/<b>273123</b> 1 data port near teacher workstation 271513 8 data ports 271513 Clock 275313 Central sound system 275123 Sound reinforcement system 275127</p> <p><b><u>Electronic Safety and Security:</u></b> Life safety devices per code 283111</p> <p><b><u>Miscellaneous:</u></b> <b>Pencil sharpener (<i>optional</i>)</b></p>
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**NOTES:**

1. Finishes/Features: Refer to Chapter 9 for specification references.

**07.0305 SURGICAL TECHNOLOGY  
Operating Room**

CHAPTER 6: CAREER-TECHNICAL SCHOOL

<b>Program Type:</b> 4		<b>FEATURES<sup>1</sup>:</b>	Spec.
<b>Size Requirements:</b> 800 SF		<b>Fixed Items:</b>	<b>Ref.#</b>
		4' of base cabinets w/1 sink	123550
		Paper towel dispenser	102813
<b>Requirements:</b>		<b>Fire Suppression:</b>	
		Fire suppression system	211000
<b>FINISHES:</b>		<b>Plumbing:</b>	
<b>Flooring:</b>		Plumbing connections	
ET, sheet vinyl, or linoleum	Spec. Ref #	221116/221119/224000	
	096500		
	096516		
<b>Base:</b>		<b>HVAC:</b>	
Resilient	096500	Supply/return air system	Div. 23
		Independent temperature control	230923
<b>Ceiling:</b>		<b>Electrical:</b>	
Suspended acoustical	095113	Fluorescent lighting	265100
<b>Walls:</b>		Illumination level: See Table 8600-5	
Painted concrete masonry units	042000/ 099100	Single level switching	262726
		6 duplex receptacles	262726
		Double duplex receptacle adjacent to data port	262726
<b>LOOSE FURNISHINGS:</b>		<b>Communications:</b>	
Wastebasket		1 data port per room	271513
		Clock	275313
		Central sound system	275123
<b>ENVIRONMENTAL CONSIDERATIONS:</b>		<b>Electronic Safety and Security:</b>	
▪ Wall minimum STC 48		Life safety devices per code	283111
▪ Ceiling minimum CAC 35, NRC 0.70		<b>Miscellaneous:</b>	
		N/A	

**NOTES:**

1. Finishes/Features: Refer to Chapter 9 for specification references.

**07.0305 SURGICAL TECHNOLOGY  
Instrument Room**

CHAPTER 6: CAREER-TECHNICAL SCHOOL

<p><b>Program Type:</b> 4</p> <p><b>Size Requirements:</b> 700 SF</p> <p><b>Requirements:</b></p> <p><u>FINISHES:</u>                  Flooring:                  ET, sheet vinyl, or linoleum</p> <p>Base:                  Resilient</p> <p>Ceiling:                  Suspended acoustical</p> <p>Walls:                  Painted concrete masonry units</p> <p><u>LOOSE FURNISHINGS:</u>                  Wastebasket</p> <p><u>ENVIRONMENTAL CONSIDERATIONS:</u></p> <ul style="list-style-type: none"> <li>▪ Wall minimum STC 45</li> <li>▪ Ceiling minimum CAC 35, NRC 0.70</li> </ul>	<p style="text-align: right;">Spec. Ref.#</p> <p><u>FEATURES<sup>1</sup>:</u></p> <p><u>Fixed Items:</u>                  20' of base cabinets w/1 sink 123550                  10' of wall cabinets 123550                  Paper towel dispenser 102813</p> <p><u>Fire Suppression:</u>                  Fire suppression system 211000</p> <p><u>Plumbing:</u>                  Plumbing connections                  221116/221119/224000</p> <p><u>HVAC:</u>                  Supply/return air system Div. 23                  Independent temperature control 230923</p> <p><u>Electrical:</u>                  Fluorescent lighting 265100                  Illumination level: See Table 8600-5                  Single level switching 262726                  6 duplex receptacles 262726                  Double duplex receptacle adjacent to                  data port 262726</p> <p><u>Communications:</u>                  1 data port per room 271513                  Clock 275313                  Central sound system 275123</p> <p><u>Electronic Safety and Security:</u>                  Life safety devices per code 283111</p> <p><u>Miscellaneous:</u>                  N/A</p>
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NOTES:

1. Finishes/Features: Refer to Chapter 9 for specification references.

**07.0305 SURGICAL TECHNOLOGY  
Scrub Room**

CHAPTER 6: CAREER-TECHNICAL SCHOOL

<b>Program Type:</b> 4		<b>FEATURES<sup>1</sup>:</b>	Spec.
<b>Size Requirements:</b> 500 SF		<b>Fixed Items:</b>	<b>Ref.#</b>
<b>Requirements:</b>		<b>12' of base and wall cabinets</b>	123550
		Paper towel dispenser	102813
<b>FINISHES:</b>		<b>Fire Suppression:</b>	
Flooring:		Fire suppression system	211000
Sheet vinyl or linoleum	Spec. Ref #	<b>Plumbing:</b>	
	096500	2 scrub sinks	224000
	096516	Plumbing connections	221116/221119/224000
Base:		<b>HVAC:</b>	
Resilient	096500	Supply/return air system	Div. 23
Ceiling:		Independent temperature control	230923
Suspended acoustical	095113	<b>Electrical:</b>	
Walls:		Fluorescent lighting	265100
Painted concrete masonry units	042000/ 099100	Illumination level: See Table 8600-5	
		Single level switching	262726
		6 duplex receptacles	262726
<b>LOOSE FURNISHINGS:</b>		<b>Communications:</b>	
Wastebasket		Clock	275313
		Central sound system	275123
<b>ENVIRONMENTAL CONSIDERATIONS:</b>		<b>Electronic Safety and Security:</b>	
▪ Wall minimum STC 45		Life safety devices per code	283111
▪ Ceiling minimum CAC 35, NRC 0.70		<b>Miscellaneous:</b>	
		N/A	

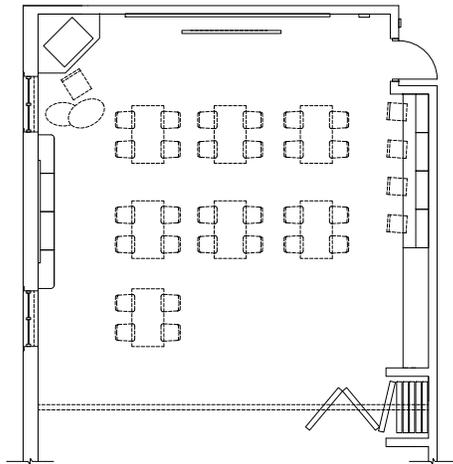
**NOTES:**

1. Finishes/Features: Refer to Chapter 9 for specification references.

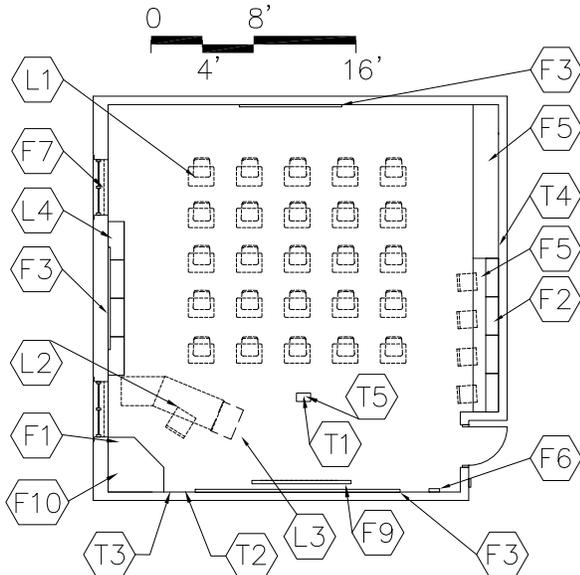
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**RELATED CLASSROOM  
CT-P4-2**

**CHAPTER 6: CAREER-TECHNICAL HIGH SCHOOL**



CLASSROOM WITH OPTIONAL FOLDING WALL



TYPICAL CLASSROOM

**CAPACITY:** 25 students  
**SIZE:** 900 SF

**PROGRAM ACTIVITIES:**

- Large group, small group, and individual instruction
- Group and individual work
- Demonstrations
- Accommodates any of the core academic disciplines

**SPATIAL RELATIONSHIPS:**

- Near other related lab
- Near teacher prep area/workroom
- Classrooms should be located in academic "zone" that is away from noisy or public activities
- Classrooms with access to media center and administrative services
- Flexibility of space
- Proximity to main corridor to accommodate other students without interrupting lab

**ENVIRONMENTAL CONSIDERATIONS:**

- **Required: View glass – minimum 5% without daylighting design; minimum 3% with daylighting design.**  
**Recommended: Daylighting design with glazing area determined by design solution.**
- Environmental sound control -  
wall **only** minimum STC 45  
ceiling minimum CAC 35, NRC 0.70

**NOTES:**

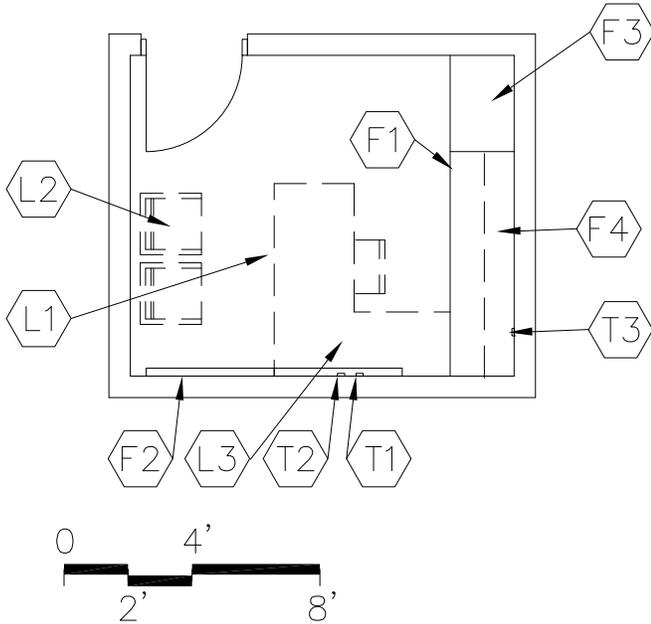
1. Loose furnishings shown represent one of many possible arrangements.
2. Depending upon the educational program of the district, a tall wardrobe may be placed in this classroom or could be placed in a teacher prep area/workroom.

**RELATED CLASSROOM  
CT-P4-2**
**CHAPTER 6: CAREER-TECHNICAL HIGH SCHOOL**

<u>FINISHES<sup>1</sup>:</u>	Spec. Ref.#	<u>FEATURES<sup>1</sup>:</u>	Spec. Ref.#
<u>Flooring:</u>			
Carpet <b>or carpet tile</b>	096816	F1 Tall wardrobe with file drawers	123550
Optional: linoleum, ET, or sheet vinyl	096516 096500 <b>096813</b>	F2 Computer work surface (could be loose)	123550
Base:		F3 <b>20'-32' combination chalk/marker board, tack board and tackable wall surface</b>	101100
Resilient base	096500	F4 <b>Reserved</b>	
Ceiling:		F5 <b>18'-24' combination base and wall cabinets</b>	123550
Suspended, acoustical	095113	F6 Pencil sharpener support ( <b>optional</b> )	062000
Walls:		F7 Windows with integral blinds	085113
Painted concrete masonry units	042000/099100	F8 <b>Reserved</b>	
<u>LOOSE FURNISHINGS:</u>			
L1 Student desks and chairs		F9 Projection screen (optional)	115213
L2 Teacher desk or workstation/computer support and chair		F10 Technology support casework	123550
L3 File cabinet		<u>Fire Suppression:</u>	
L4 9' of low bookcases (fixed or mobile) Wastebasket		Fire suppression system	211000
<u>Plumbing:</u>			
N/A			
<u>HVAC:</u>			
		Supply/return air system	Div. 23
		Independent temperature control	230923
<u>Electrical:</u>			
		Fluorescent lighting:	265100
		Illumination level: See Table 8600-5	
		Multilevel switching	262726
		4 duplex receptacles	262726
		Double duplex receptacle adjacent to each data and video port	262726
<u>Communications:</u>			
		T1 1 video port	271533/271543
		T2 1 voice port and phone	271513/ <b>273123</b>
		T3 1 data port near teacher workstation	271513
		T4 4 data ports (minimum) for <b>classroom technology</b>	271513
		Clock	275313
		Central sound system	275123
		Sound reinforcement system	275127
		T5 Overhead projector	274119
<u>Electronic Safety and Security:</u>			
		Life safety devices per code	283111
<u>Miscellaneous:</u>			
<b>Pencil sharpener (optional)</b>			
M1 Operable partitions between classrooms are optional	102226		

**NOTES:**

1. Finishes/Features: Refer to Chapter 9 for specification references.
2. Technology components may be placed in a separate small cabinet, or integrated in the other casework in the room.
3. Where appropriate, some casework may be mobile to add flexibility and become part of the loose furnishings.



**PROGRAM ACTIVITIES:**

- Private space for program instructor
- One-on-one conferences with academic instructors, students, etc.

**SPATIAL RELATIONSHIPS:**

- Near related lab
- Direct access to school circulation areas

**ENVIRONMENTAL CONSIDERATIONS:**

- Environmental sound control -  
wall minimum STC 45  
ceiling minimum CAC 35, NRC 0.70

CAPACITY: 1 - 3 persons  
SIZE: 120 SF

**NOTES:**

1. Loose furnishings shown represent one of many possible arrangements.

**OFFICE  
CT-P4-3**

## CHAPTER 6: CAREER-TECHNICAL SCHOOL

<u>FINISHES<sup>1</sup>:</u>	Spec. Ref.#	<u>FEATURES<sup>1</sup>:</u>	Spec. Ref.#
Flooring:		<u>Fixed Items:</u>	
Carpet or carpet tile	096816	F1 Work surface with file drawers	123550
	096813	F2 4' of tack board	101100
		or tackable wall surface	
Base:		F3 Tall wardrobe	123550
Resilient base	096500	F4 Wall cabinets above work surface	123550
Ceiling:		<u>Fire Suppression:</u>	
Suspended, acoustical	095113	Fire suppression system	211000
Walls:		<u>Plumbing:</u>	
Painted gypsum wallboard		N/A	
over metal studs	092116/099100		
<u>LOOSE FURNISHINGS:</u>		<u>HVAC:</u>	
L1 Desk and chair		Supply/return air system	Div. 23
L2 Visitor chairs		Independent temperature control	230923
L3 Computer desk return			
Wastebasket		<u>Electrical:</u>	
		Single level switching	262726
		Fluorescent lighting	265100
		Illumination level: See Table 8600-5	
		4 duplex receptacles	262726
		Double duplex receptacle adjacent	
		to data and video port	262726
		<u>Communications:</u>	
		T1 1 voice port and phone	271513/ <b>273123</b>
		T2 1 data port near workstation	271513
		T3 1 video port	271533/271543
		Central sound system	275123
		Clock	275313
		<u>Electronic Safety and Security:</u>	
		Life safety devices per code	283111
		<u>Miscellaneous:</u>	
		N/A	

NOTES:

1. Finishes/Features: Refer to Chapter 9 for specification references. Optional: moveable cabinets
2. Fixed casework and loose furnishings can also be all fixed casework or all loose furnishings.

**PROGRAM ACTIVITIES:**

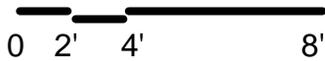
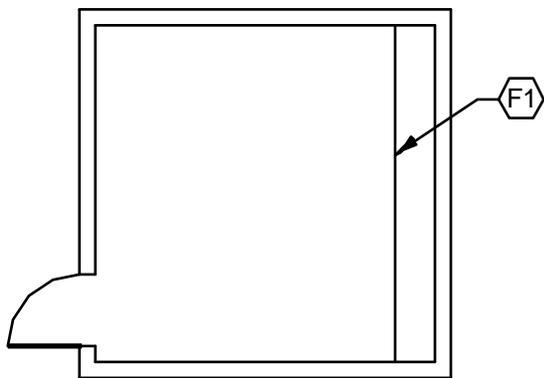
- Space for storage of lab equipment

**SPATIAL RELATIONSHIPS:**

- Near related lab

**ENVIRONMENTAL CONSIDERATIONS:**

N/A



CAPACITY:  
SIZE:

N/A  
200 SF

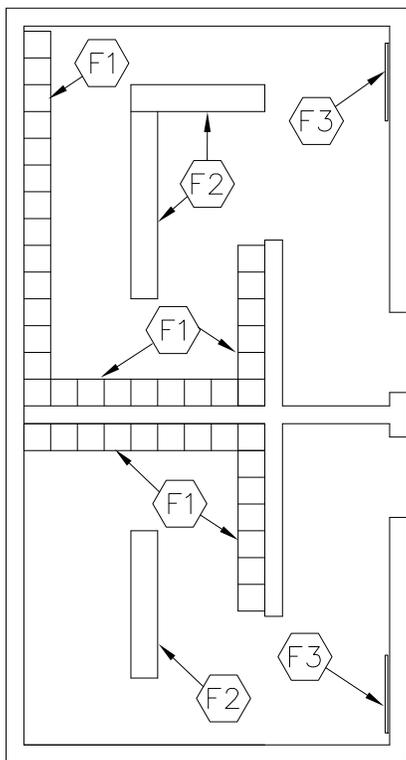
NOTES:

**STORAGE AREA  
CT-P4-4**
**CHAPTER 6: CAREER-TECHNICAL SCHOOL**

	Spec. Ref.#		Spec. Ref.#
<u>FINISHES<sup>1</sup>:</u>		<u>FEATURES<sup>1</sup>:</u>	
Flooring:		<u>Fixed Items<sup>1</sup>:</u>	
<b>Sealed</b> concrete	033000	F1 8'-20' of open shelving	
		Depth may vary (fixed or loose)	123550
Base:		<u>Fire Suppression:</u>	
Resilient base	096500	Fire suppression system	211000
Ceiling:		<u>Plumbing:</u>	
Exposed structure	---	N/A	
Walls:		<u>HVAC:</u>	
Painted concrete masonry units	042000/099100	To be determined by Design Professional	
		Supplemental heat as required	Div. 23
<u>LOOSE FURNISHINGS:</u>		<u>Electrical:</u>	
N/A		Single level switching	262726
		Fluorescent lighting	265100
		Illumination level: See Table 8600-5	
		Duplex receptacles	262726
		<u>Communications:</u>	
		N/A	
		<u>Electronic Safety and Security:</u>	
		Life safety devices per code	283111
		<u>Miscellaneous:</u>	
		N/A	

**NOTES:**

1. Finishes/Features: Refer to Chapter 9 for specification references.



50 total lockers

**PROGRAM ACTIVITIES:**

- Personal and health needs for the program Specific users.
- Changing of clothes and/or uniforms.
- Storage of personal items while students are in lab.

**SPATIAL RELATIONSHIPS:**

- Adjacent to related lab

**ENVIRONMENTAL CONSIDERATIONS:**

- Sanitary and durable finishes.
- Environmental sound control  
Wall minimum STC 40  
Ceiling minimum CAC 35, NRC 0.70

CAPACITY:  
SIZE:

N/A  
450 SF

**NOTES:**

1. Large and small changing areas are interchangeable for either males or females. Determination based on male/female ratio within each program.

**CHANGING ROOM  
CT-P4-5**
**CHAPTER 6: CAREER-TECHNICAL SCHOOL**

<u>FINISHES<sup>1</sup>:</u>	Spec. Ref.#	<u>FEATURES<sup>1</sup>:</u>	Spec. Ref.#
<u>Flooring:</u>		<u>Fixed Items<sup>1</sup>:</u>	
Polished concrete finishing, or colored concrete finishing	033510 033519	F1 Student lockers	105113
Optional: linoleum or rubber	096500 096516	F2 Locker benches	062000
		F3 24" x 60" mirror	102813
<u>Base:</u>		<u>Fire Suppression:</u>	
Resilient base	096500	Fire suppression system	211000
<u>Ceiling:</u>		<u>Plumbing:</u>	
Suspended, acoustical with high impact hold down clips	095113	N/A	
<u>Walls:</u>		<u>HVAC:</u>	
Painted concrete masonry units	042000 / 099100	Supply/Return air system	Div. 23
		Exhaust air system	Div. 23
		Supplemental heat as required	Div. 23
		Individual temperature control	230923
<u>LOOSE FURNISHINGS</u>		<u>Electrical:</u>	
Wastebaskets		Single level switching	262726
		Fluorescent lighting	265100
		Illumination level: See Table 8600-6	
		2 Duplex receptacles	262726
		Means of egress lighting per code	265100
		<u>Communications:</u>	
		Clock	275313
		Central Sound System	275123
		<u>Electronic Safety and Security:</u>	
		Life safety devices per code	283111
		<u>Miscellaneous:</u>	
		N/A	

**NOTES:**

1. Finishes/Features: Refer to Chapter 9 for specification references.

TABLE OF CONTENTS

A.	General Description .....	6315-3
B.	Program Example .....	6315-4
C.	Lab Plate Example .....	6315-5
D.	Lab Descriptions	
	▶ Agribusiness and Production Systems .....	6315-8
	▶ Auto Specialization .....	6315-9
	▶ Brick, Block, and Cement Masonry .....	6315-10
	▶ Building and Property Maintenance .....	6315-11
	▶ Building Technology .....	6315-11
	▶ Custodial Services .....	6315-12
	▶ Electrical Trades .....	6315-13
	▶ Environmental Controls Technologies .....	6315-14
	▶ Heavy Equipment (Construction) .....	6315-15
	▶ Integrated Systems Technology .....	6315-16
	▶ Interior Design and Application .....	6315-17
	▶ Manufacturing Design and Development .....	6315-18
	▶ Manufacturing Operations .....	6315-18
	▶ Natural Resource Management .....	6315-19
	▶ Plumbing and Pipefitting .....	6315-20
	▶ Power Equipment Technology .....	6315-21
	▶ Power Transmission .....	6315-22
	▶ Welding and Cutting .....	6315-23
E.	Related Classroom Plate .....	6315-25
F.	Office Plate .....	6315-27
G.	Storage Area Plate .....	6315-29
H.	Changing Room Plate .....	6315-31
I.	Tool Crib Plate .....	6315-33
J.	Reference Room Plate .....	6315-35
K.	Toilet Room Plate .....	6315-37

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**Program Type 5**

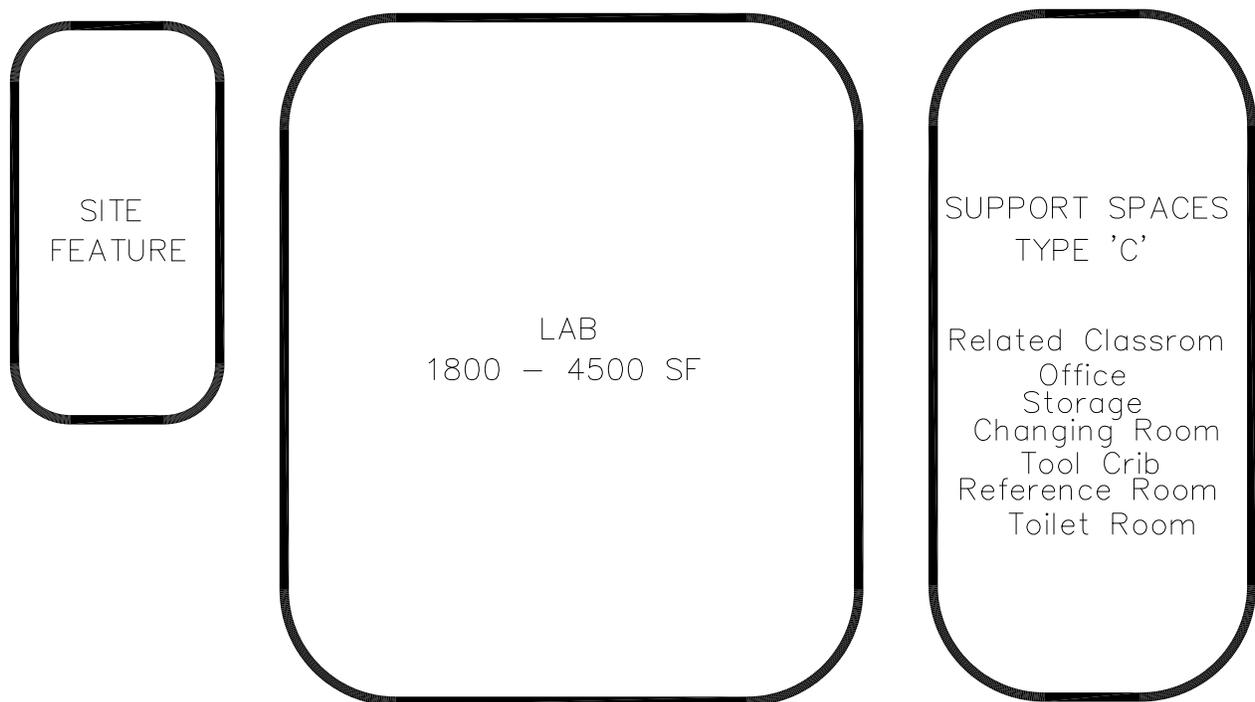
Description: Medium to large sized lab space with enhanced support space.

Lab space to be "high-bay" (18' min. clearance) with exposed building structure.

Lab to utilize standard construction with the following exception – lab floor slab to be 8" thick.

Support space to be finished with sealed concrete or vinyl composition tile, paint, and suspended acoustical ceiling. Lab may have possible site feature.

**Related classroom office, changing room, reference room, and toilet room may be air-conditioned. The high bay labs have no air conditioning unless noted otherwise.**

**NOTES:**

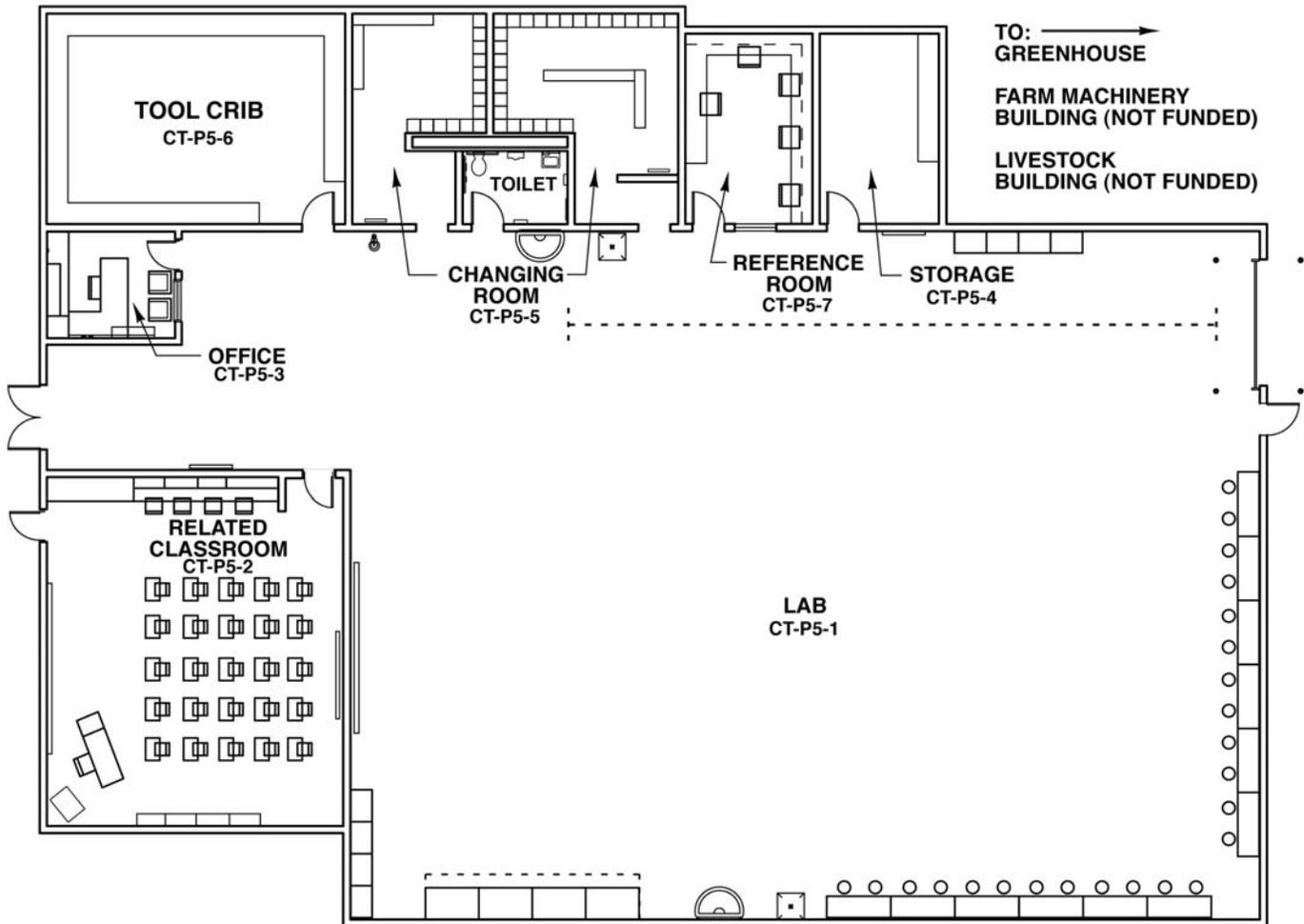
This is an example of how the Program Type 5 spaces in a career-technical school could be arranged. This is meant only to demonstrate the relationships between various spaces of this area.

Following are the Program Type 5 space plates:

CT-P5-1	Lab
CT-P5-2	Related Classroom
CT-P5-3	Office
CT-P5-4	Storage
CT-P5-5	Changing Room
CT-P5-6	Tool Crib
CT-P5-7	Reference Room
CT-P5-8	Toilet Room

**PROGRAM TYPE 5  
EXAMPLE**

CHAPTER 6: CAREER-TECHNICAL SCHOOL

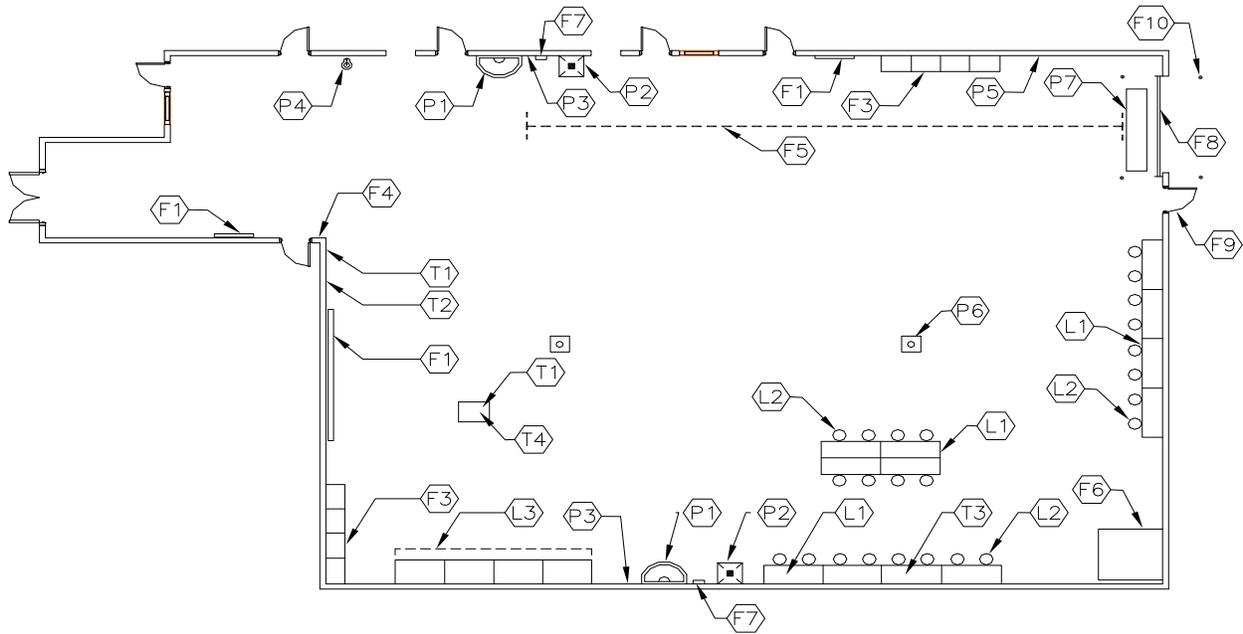


**Program Type 5**

This is an example to show the possible relationships of spaces for this program type.

**NOTES:**

1. See lab descriptions within this section for specific lab requirements.
2. See individual space plates at the end of this section for specific requirements.



CAPACITY:	24 Students
SIZE:	1,800 – 4,500 SF
	(see lab summaries for exact sizes)
ANCILLARY SPACES:	CT-P5-2 thru CT-P5-8

**NOTES:**

1. Loose furnishings shown represent one of many possible arrangements.
2. Graphic plate is an example only. Other labs within this program are not drawn – refer to lab summaries within this program type for information on a particular lab.

**LAB**  
**CT-P5-1**

CHAPTER 6: CAREER-TECHNICAL SCHOOL

PROGRAM ACTIVITIES:

- Large and small group instruction
- Group and individual work
- Demonstrations

SPATIAL RELATIONSHIPS:

- Near other related labs
- Adjacent to typical support spaces
- Proximity to large group restrooms
- Located away from noisy or public activities
- Proximity to core academic area and common use areas
- Flexibility of space

ENVIRONMENTAL CONSIDERATIONS:

- **Required: View glass – minimum 5% without daylighting design; minimum 3% with daylighting design.**  
**Recommended: Daylighting design with glazing area determined by design solution.**
- Environmental sound control -  
wall **only** minimum STC **45**  
ceiling minimum CAC 35, NRC 0.70

NOTES:

1. Finishes/Features: Refer to Chapter 9 for specification references.
2. Loose Furnishings: Refer to Lab Profiles within this section.
3. Loose Furnishings, fixed equipment, utility locations, and general footprint of room shown represent one of many possible arrangements.

**01.0301 AGRIBUSINESS AND PRODUCTION SYSTEMS**

CHAPTER 6: CAREER-TECHNICAL SCHOOL

**CT-P5-1**

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**01.0301 AGRIBUSINESS AND PRODUCTION SYSTEMS**  
**CT-P5-1**

## CHAPTER 6: CAREER-TECHNICAL SCHOOL

<b>PROGRAM DESCRIPTION:</b>		<b>FEATURES<sup>1</sup>:</b>	
Applies principles of economics, business management and marketing in both an entrepreneur/manager and an employee role to the leadership, planning, development, and analyzing of business enterprises related to agriculture, food, and natural resources.		<b>Spec. Ref.#</b>	
<b>Program Type:</b>	5	<b>Fixed Items:</b>	
<b>Size Requirements:</b>	4,500 SF Lab	F1	<b>24' of chalk/marker board, tack board, or tackable wall surface</b> 101100
<b>Lab Requirements:</b>		F2	<b>Reserved</b>
		F3	24' of tall storage cabinets 123550
		F4	Pencil sharpener support ( <i>optional</i> ) 062000
		F5	Overhead chain hoist 412223
		F7	(4) Paper towel dispensers 102813
		F8	12'x14' motorized overhead sectional door to exterior 083613
		F9	3'x7' hollow metal service door to exterior 081113
		F10	Steel bollards at overhead door, both sides 055000
<b>FINISHES:</b>	<b>Spec. Ref #</b>	<b>Fire Suppression:</b>	
Flooring:		Fire suppression system 211000	
<b>Sealed</b> concrete	033000	<b>Plumbing:</b>	
Ceiling:		P1	2 washfountains (minimum) 224000
Painted, exposed structure	099100	P2	2 utility sinks (minimum) 224000
Walls:		P3	2 hose bibbs (minimum) 224000
Painted concrete masonry units	042000/ 099100	P4	Safety shower/eyewash 224500
<b>LOOSE FURNISHINGS:</b>		P5	6 compressed air connections 221513
L1 (12) Workbenches with heavy-duty metal tops		P6	2 floor drains 224000
L2 (24) Stools or chairs		P7	1 trench drain 224000
L3 (4) Welding tables			Plumbing connections 221116/221119/224000
Wastebasket		<b>HVAC:</b>	
<b>SITE FEATURES:</b>		Supply/return air system Div. 23	
Greenhouse - 1000 SF	133413	Independent temperature control 230923	
Concrete flooring (with drains)		Welding hood exhaust Div. 23	
Minimum of one 8'x10' overhead door		<b>Electrical:</b>	
Provide electrical, plumbing, and heating/ventilation systems as per greenhouse manufacturer's recommendations		High intensity lighting or fluorescent lighting 265100	
Minimum of 2 hose bibs		Illumination level: See Table 8600-5	
Fire suppression system if required		Multilevel switching 262726	
Plan for the following if required by school curriculum requirements:		30 duplex receptacles (minimum) 262726	
Farm machinery building		Double duplex receptacle adjacent to each data and video port 262726	
Livestock building		(6) 220 volt receptacles 262726	
Overhead chain hoist		<b>Communications:</b>	
<b>Miscellaneous: Pencil sharpener (optional)</b>		T1	1 video port and video display device 271533/271543/274119
		T2	1 voice port and phone 271513/ <b>273123</b>
		T3	4 data ports 271513
			Clock 275313
			Central sound system 275123
		<b>Electronic Safety and Security:</b>	
			Life safety devices per code 283111

**NOTES:**

1. Finishes/Features: Refer to Chapter 9 for specification references.

**17.0303 AUTO SPECIALIZATION  
CT-P5-1**

CHAPTER 6: CAREER-TECHNICAL SCHOOL

<b>PROGRAM DESCRIPTION:</b> Specialized learning experiences that involve more intensive training in a single automotive system. Examples may include Automotive Detailing, Custom Car Prep, High Performance, Alternative Fuel, Engine Repair, and Transmission Service.		<b>FEATURES<sup>1</sup>:</b> <u>Fixed Items:</u> <b>24' of chalk/marker board, tack board, or tackable wall surface</b> 101100 24' of tall storage cabinets 123550 Pencil sharpener support ( <i>optional</i> ) 062000 (4) Paper towel dispensers 102813 12'x14' motorized overhead sectional door to exterior 083613 3'x7' hollow metal service door to exterior 081113 Steel bollards at overhead door, both sides 055000		Spec. Ref.#
<b>Program Type:</b>	5			
<b>Size Requirements:</b>	3,500 SF Lab			
Lab Requirements:				
<b>FINISHES:</b>		Spec. Ref #		
Flooring:				
<b>Sealed</b> concrete		033000		
Ceiling:				
Painted, exposed structure		099100		
Walls:				
Painted concrete masonry units		042000/ 099100		
<b>LOOSE FURNISHINGS:</b>				
(8) Workbenches with heavy-duty metal tops				
(24) Stools or chairs				
Wastebasket				
<u>The following items to be funded by the School District:</u> Car lifts				
		<b>Fire Suppression:</b>		
		Fire suppression system	211000	
		<b>Plumbing:</b>		
		2 washfountains (minimum)	224000	
		2 utility sinks (minimum)	224000	
		2 hose bibbs (minimum)	224000	
		Safety shower/eyewash	224000	
		2 floor drains	224000	
		1 trench drain	224000	
		6 compressed air connections	221513	
		Plumbing connections	221116/221119/224000	
		<b>HVAC:</b>		
		Supply/return air system	Div. 23	
		Independent temperature control	230923	
		Vehicle exhaust system	Div. 23	
		<b>Electrical:</b>		
		High intensity lighting or fluorescent lighting	265100	
		Illumination level: See Table 8600-5		
		Multilevel switching	262726	
		30 duplex receptacles (minimum)	262726	
		Double duplex receptacle adjacent to each data and video port	262726	
		(6) 220 volt receptacles	262726	
		<b>Communications:</b>		
		1 video port and video display device	271533/271543/274119	
		1 voice port and phone	271513/ <b>273123</b>	
		4 data ports	271513	
		Clock	275313	
		Central sound system	275123	
		<b>Electronic Safety and Security:</b>		
		Life safety devices per code	283111	
		<b>Miscellaneous:</b>	<b>Pencil sharpener (optional)</b>	

**NOTES:**

1. Finishes/Features: Refer to Chapter 9 for specification references.



**17.1011 BUILDING AND PROPERTY MAINTENANCE  
17.1017 BUILDING TECHNOLOGY**

CHAPTER 6: CAREER-TECHNICAL SCHOOL

**CT-P5-1**

<b><u>PROGRAM DESCRIPTION:</u></b> Organized learning experiences in the classroom and laboratory concerned with the skills necessary to keep the physical structure of an office building, factory, apartment building, house, or similar structure in good repair. Included is instruction in carpentry; roofing application and repair; ceramic tile and masonry application and repair; electrical installation and repair; painting and wallpapering; and plumbing.		<b>Spec. Ref.#</b>
<b>Program Type:</b> 5		<b>FEATURES<sup>1</sup>:</b>
<b>Size Requirements:</b> 3,000 SF Lab		<b>Fixed Items:</b>
Lab Requirements:		<b>24' of chalk/marker board, tack board, or tackable wall surface</b> 101100
		24' of tall storage cabinets 123550
		Pencil sharpener support ( <i>optional</i> ) 062000
		(3) Paper towel dispensers 102813
		12'x14' motorized overhead sectional door to exterior 083613
		3'x7' hollow metal service door to exterior 081113
		Steel bollards at overhead door, both sides 055000
		<b>Fire Suppression:</b>
		Fire suppression system 211000
		<b>Plumbing:</b>
		1 washfountain (minimum) 224000
		2 utility sinks (minimum) 224000
		2 hose bibbs (minimum) 224000
		Safety shower/eyewash 224000
		2 floor drains 224000
		1 trench drain 224000
		6 compressed air connections 221500
		2 natural gas connections 226313
		Master gas shut-off valve 226313
		Plumbing connections 221116/221119/224000
		<b>HVAC:</b>
		Supply/return air system Div. 23
		Independent temperature control 230923
		Welding hood and exhaust Div. 23
		<b>Electrical:</b>
		High intensity lighting or fluorescent lighting 265100
		Illumination level: See Table 8600-5
		Multilevel switching 262726
		30 duplex receptacles (minimum) 262726
		Double duplex receptacle adjacent to each data and video port 262726
		(2) 220 volt receptacles 262726
		(2) 277 volt receptacles 262726
		(2) 408 volt receptacles 262726
		Room safety push-button 262726
		<b>Communications:</b>
		1 video port and video display device 271533/271543/274119
		1 voice port and phone 271513/ <b>273123</b>
		4 data ports 271513
		Clock 275313
		Central sound system 275123
<b>FINISHES:</b>	<b>Spec. Ref #</b>	
Flooring:		
<b>Sealed</b> concrete	033000	
Ceiling:		
Painted, exposed structure	099100	
Walls:		
Painted concrete masonry units	042000/ 099100	
<b>LOOSE FURNISHINGS:</b>		
(12) Workbenches with heavy-duty metal tops		
(24) Stools or chairs		
(2) Welding tables		
Wastebasket		
<b>Electronic Safety and Security:</b>		
Life safety devices per code	283111	
<b>Miscellaneous:</b>		
<b>Pencil sharpener (optional)</b>		

**NOTES:**

1. Finishes/Features: Refer to Chapter 9 for specification references.

**17.1100 CUSTODIAL SERVICES****CT-P5-1**

## CHAPTER 6: CAREER-TECHNICAL SCHOOL

<b>PROGRAM DESCRIPTION:</b>		<b>Spec.</b>
<b>Utilizes industry standards and a math, science, ELA, and technology framework to introduce concepts of layout, assembly, installation, testing, and maintenance of electrical fixtures and apparatus, and the wiring used in electrical systems.</b>		<b>Ref.#</b>
<b>Program Type:</b>	5	
<b>Size Requirements:</b>	2,500 SF Lab	
<b>Lab Requirements:</b>		
<b>FINISHES:</b>	<b>Spec.</b>	
	<b>Ref #</b>	
<b>Flooring:</b>		
<b>Sealed</b> concrete	033000	
<b>Ceiling:</b>		
Painted, exposed structure	099100	
<b>Walls:</b>		
Painted concrete masonry units	042000/ 099100	
<b>LOOSE FURNISHINGS:</b>		
(12) Workbenches with heavy-duty metal tops		
(24) Stools or chairs		
Wastebasket		
		<b>FEATURES<sup>1</sup>:</b>
		<b>Fixed Items:</b>
		<b>24' of chalk/marker board, tack board, or tackable wall surface</b> 101100
		24' of tall storage cabinets 123550
		Pencil sharpener support ( <i>optional</i> ) 062000
		(3) Paper towel dispensers 102813
		12'x14' motorized overhead sectional door to exterior 083613
		3'x7' hollow metal service door to exterior 081113
		Steel bollards at overhead door, both sides 055000
		<b>Fire Suppression:</b>
		Fire suppression system 211000
		<b>Plumbing:</b>
		1 washfountain (minimum) 224000
		2 utility sinks (minimum) 224000
		2 hose bibbs (minimum) 224000
		Safety shower/eyewash 224000
		2 floor drains 224000
		1 trench drain 224000
		Plumbing connections 221116/221119/224000
		<b>HVAC:</b>
		Supply/return air system Div. 23
		Independent temperature control 230923
		<b>Electrical:</b>
		High intensity lighting or fluorescent lighting 265100
		Illumination level: See Table 8600-5
		Multilevel switching 262726
		30 duplex receptacles (minimum) 262726
		Double duplex receptacle adjacent to each data and video port 262726
		(6) 220 volt receptacles 262726
		<b>Communications:</b>
		1 video port and video display device 271533/271543/274119
		1 voice port and phone 271513/ <b>273123</b>
		4 data ports 271513
		Clock 275313
		Central sound system 275123
		<b>Electronic Safety and Security:</b>
		Life safety devices per code 283111
		<b>Miscellaneous:</b>
		<b>Pencil sharpener (optional)</b>

**NOTES:**

1. Finishes/Features: Refer to Chapter 9 for specification references.

**17.1002 ELECTRICAL TRADES  
CT-P5-1**

CHAPTER 6: CAREER-TECHNICAL SCHOOL

<b><u>PROGRAM DESCRIPTION:</u></b>		<b>Spec. Ref.#</b>
Specialized classroom and laboratory experiences concerned with the layout, assembly, installation, testing, and maintenance of electrical fixtures and apparatus, and the wiring used in electrical systems. Instruction is provided in worksite safety; electrical principles; the application of codes and standards; residential, commercial, and industrial installations including motors and specialized systems; and the reading, interpretation, and application of blueprints and wiring diagrams. A one year program option is available with an exit in residential wiring, or with an exit in commercial/industrial wiring upon the recommendation of the local advisory committee and the approval of the local board of education.		
<b>Program Type:</b>	5	
<b>Size Requirements:</b>	3,000 SF Lab	
Lab Requirements:		
<b><u>FINISHES:</u></b>	<b>Spec. Ref #</b>	
Flooring:		
<b>Sealed</b> concrete	033000	
Ceiling:		
Painted, exposed structure	099100	
Walls:		
Painted concrete masonry units	042000/ 099100	
<b><u>LOOSE FURNISHINGS:</u></b>		
(12) Workbenches with heavy-duty non-conductive tops		
(24) Stools or chairs		
Wastebasket		
<b><u>Electronic Safety and Security:</u></b>		
Life safety devices per code	283111	
<b><u>Miscellaneous:</u></b>		
<b>Pencil sharpener (optional)</b>		
		<b>FEATURES<sup>1</sup>:</b>
		<b>Fixed Items:</b>
		<b>24' of chalk/marker board, tack board, or tackable wall surface</b> 101100
		24' of tall storage cabinets 123550
		Pencil sharpener support ( <i>optional</i> ) 062000
		(3) Paper towel dispensers 102813
		12'x14' motorized overhead sectional door to exterior 083613
		3'x7' hollow metal service door to exterior 081113
		Steel bollards at overhead door, both sides 055000
		<b>Fire Suppression:</b>
		Fire suppression system 211000
		<b>Plumbing:</b>
		1 washfountain (minimum) 224000
		2 utility sinks (minimum) 224000
		2 hose bibbs (minimum) 224000
		Safety shower/eyewash 224000
		2 floor drains 224000
		1 trench drain 224000
		Plumbing connections 221116/221119/224000
		<b>HVAC:</b>
		Supply/return air system Div. 23
		Independent temperature control 230923
		<b>Electrical:</b>
		High intensity lighting or fluorescent lighting 265100
		Illumination level: See Table 8600-5
		Multilevel switching 262726
		30 duplex receptacles (minimum) 262726
		Double duplex receptacle adjacent to each data and video port 262726
		208v 3-phase service 262726
		480v 3-phase service 262726
		100 amp 208v 3-phase bus duct 262726
		100 amp 480v 3-phase bus duct 262726
		Fiber optic service 262726
		Cat 5 service 262726
		Room safety push-button 262726
		<b>Communications:</b>
		1 video port and video display device 271533/271543/274119
		1 voice port and phone 271513/ <b>273123</b>
		4 data ports 271513
		Clock 275313
		Central sound system 275123
<b><u>NOTES:</u></b>		
1. Finishes/Features: Refer to Chapter 9 for specification references.		



**17.1003 HEAVY EQUIPMENT (Construction)**

CHAPTER 6: CAREER-TECHNICAL SCHOOL

**CT-P5-1**

<b><u>PROGRAM DESCRIPTION:</u></b>	Classroom and practical work experiences concerned with the operation, maintenance, and repair of heavy-duty construction equipment, such as bulldozers, backhoes, cranes, graders, tractors, concrete mixers, crawler-mounted shovels, trailer-mounted compressors, and the gasoline or diesel engines powering the equipment.	<b><u>FEATURES<sup>1</sup>:</u></b>	Spec.
<b>Program Type:</b>	5	<b><u>Fixed Items:</u></b>	<b><u>Ref.#</u></b>
<b>Size Requirements:</b>	4,500 SF Lab	<b><i>24' of chalk/marker board, tack board, or tackable wall surface</i></b> 101100 24' of tall storage cabinets 123550 Pencil sharpener support ( <i>optional</i> ) 062000 (3) Paper towel dispensers 102813 12'x14' motorized overhead sectional door to exterior 083613 3'x7' hollow metal service door to exterior 081113 Steel bollards at overhead door, both sides 055000	
<b>Lab Requirements:</b>		<b><u>Fire Suppression:</u></b>	
<b><u>FINISHES:</u></b>	Spec.	Fire suppression system 211000	
Flooring:	<b><u>Ref #</u></b>	<b><u>Plumbing:</u></b>	
<b>Sealed</b> concrete	033000	1 washfountain (minimum) 224000 2 utility sinks (minimum) 224000 2 hose bibbs (minimum) 224000 Safety shower/eyewash 224000 2 floor drains 224000 1 trench drain 224000 6 compressed air connections 221500 Plumbing connections 221116/221119/224000	
Ceiling:		<b><u>HVAC:</u></b>	
Painted, exposed structure	099100	Supply/return air system Div. 23 Independent temperature control 230923	
Walls:		<b><u>Electrical:</u></b>	
Painted concrete masonry units	042000/ 099100	High intensity lighting or fluorescent lighting 265100 Illumination level: See Table 8600-5 Multilevel switching 262726 30 duplex receptacles (minimum) 262726 Double duplex receptacle adjacent to each data and video port 262726 (2) 220 volt receptacles 262726	
<b><u>LOOSE FURNISHINGS:</u></b>		<b><u>Communications:</u></b>	
(8) Workbenches with heavy-duty metal tops		1 video port and video display device 271533/271543/274119	
(24) Stools or chairs		1 voice port and phone 271513/ <b>273123</b>	
Wastebasket		4 data ports 271513	
<b><u>Miscellaneous:</u></b>		Clock 275313	
<b>Pencil sharpener (optional)</b>		Central sound system 275123	
		<b><u>Electronic Safety and Security:</u></b>	
		Life safety devices per code 283111	

**NOTES:**

1. Finishes/Features: Refer to Chapter 9 for specification references.

**17.1012 INTEGRATED SYSTEMS TECHNOLOGY  
CT-P5-1**

## CHAPTER 6: CAREER-TECHNICAL SCHOOL

<b>PROGRAM DESCRIPTION:</b>		<b>Spec.</b>
<b>Organized learning experiences in the classroom and shop concerned with the maintenance of machinery and mechanical equipment of an industrial plant or factory. Inspection, disassembly, repair, and reassembly of machines and equipment is included in the training experience. Skill training in the use of tools in several trades is also included.</b>		<b>Ref.#</b>
<b>Program Type:</b>	5	
<b>Size Requirements:</b>	3,500 SF Lab	
<b>Lab Requirements:</b>		
<b>FINISHES:</b>	<b>Spec.</b>	
	<b>Ref #</b>	
<b>Flooring:</b>		
<b>Sealed</b> concrete	033000	
<b>Ceiling:</b>		
Painted, exposed structure	099100	
<b>Walls:</b>		
Painted concrete masonry units	042000/ 099100	
<b>LOOSE FURNISHINGS:</b>		
(12) Workbenches with heavy-duty metal tops		
(24) Stools or chairs		
(4) Welding tables		
Wastebasket		
<b>Electronic Safety and Security:</b>		
Life safety devices per code	283111	
<b>Miscellaneous:</b>		
<b>Pencil sharpener (optional)</b>		
<b>FEATURES<sup>1</sup>:</b>		
<b>Fixed Items:</b>		
<b>24' of chalk/marker board, tack board, or tackable wall surface</b>		101100
24' of tall storage cabinets		123550
Pencil sharpener support ( <i>optional</i> )		062000
(4) Paper towel dispensers		102813
12'x14' motorized overhead sectional door to exterior		083613
3'x7' hollow metal service door to exterior		081113
Steel bollards at overhead door, both sides		055000
<b>Fire Suppression:</b>		
Fire suppression system		211000
<b>Plumbing:</b>		
2 washfountains (minimum)		224000
2 utility sinks (minimum)		224000
2 hose bibbs (minimum)		224000
Safety shower/eyewash		224000
2 floor drains		224000
1 trench drain		224000
6 compressed air connections		221500
Plumbing connections		221116/221119/224000
<b>HVAC:</b>		
Supply/return air system		Div. 23
Independent temperature control		230923
Welding hood and exhaust		Div. 23
<b>Electrical:</b>		
High intensity lighting or fluorescent lighting		265100
Illumination level: See Table 8600-5		
Multilevel switching		262726
30 duplex receptacles (minimum)		262726
Double duplex receptacle adjacent to each data and video port		262726
(4) 220 volt receptacles		262726
208v 3-phase service		262726
480v 3-phase service		262726
Room safety push-button		262726
<b>Communications:</b>		
1 video port and video display device		271533/271543/274119
1 voice port and phone		271513/ <b>273123</b>
4 data ports		271513
Clock		275313
Central sound system		275123

**NOTES:**

1. Finishes/Features: Refer to Chapter 9 for specification references.
2. ***This lab may be air-conditioned.***

**17.1005 INTERIOR DESIGN AND APPLICATION**  
**CT-P5-1**

## CHAPTER 6: CAREER-TECHNICAL SCHOOL

		Spec. Ref.#
<b><u>PROGRAM DESCRIPTION:</u></b>		
Utilizes industry standards and a math, science, ELA, and technology framework to introduce concepts of the interior construction industry; including painting, wallpapering, flooring, tiling, drywall, trim, lighting, and more.		
<b>Program Type:</b>	5	
<b>Size Requirements:</b>	3,000 SF Lab	
Lab Requirements:		
<b><u>FINISHES:</u></b>	Spec. Ref #	
Flooring:		
<b>Sealed</b> concrete	033000	
Ceiling:		
Painted, exposed structure	099100	
Walls:		
Painted concrete masonry units	042000/ 099100	
<b><u>LOOSE FURNISHINGS:</u></b>		
(12) Workbenches with heavy-duty metal tops		
(24) Stools or chairs		
Wastebasket		
<b><u>Miscellaneous:</u></b>		
<b>Pencil sharpener (optional)</b>		
<b><u>FEATURES<sup>1</sup>:</u></b>		
<b><u>Fixed Items:</u></b>		
<b>24' of chalk/marker board, tack board, or tackable wall surface</b>		101100
24' of tall storage cabinets		123550
Pencil sharpener support ( <i>optional</i> )		062000
(4) Paper towel dispensers		102813
12'x14' motorized overhead sectional door to exterior		083613
3'x7' hollow metal service door to exterior		081113
Steel bollards at overhead door, both sides		055000
<b><u>Fire Suppression:</u></b>		
Fire suppression system		211000
<b><u>Plumbing:</u></b>		
2 washfountains (minimum)		224000
2 utility sinks (minimum)		224000
2 hose bibbs (minimum)		224000
Safety shower/eyewash		224000
2 floor drains		224000
1 trench drain		224000
Plumbing connections		221116/221119/224000
<b><u>HVAC:</u></b>		
Supply/return air system		Div. 23
Independent temperature control		230923
<b><u>Electrical:</u></b>		
High intensity lighting or fluorescent lighting		265100
Illumination level: See Table 8600-5		
Multilevel switching		262726
30 duplex receptacles (minimum)		262726
Double duplex receptacle adjacent to each data and video port		262726
<b><u>Communications:</u></b>		
1 video port and video display device		271533/271543/274119
1 voice port and phone		271513/ <b>273123</b>
4 data ports		271513
Clock		275313
Central sound system		275123
<b><u>Electronic Safety and Security:</u></b>		
Life safety devices per code		283111

**NOTES:**

1. Finishes/Features: Refer to Chapter 9 for specification references.

**17.0360 MANUFACTURING OPERATIONS**  
**17.1300 MANUFACTURING DESIGN AND DEVELOPMENT**  
**CT-P5-1**

## CHAPTER 6: CAREER-TECHNICAL SCHOOL

<u>PROGRAM DESCRIPTION:</u>	Spec. Ref.#
<u>Mfg Operations:</u> Utilizing business and industry, math, English, science and technology standards, introduces the concepts of Manufacturing Operations; management, process and product quality assurance, logistics, maintenance, manufacturing costs, marketing and safety and health.	
<u>Mfg Design &amp; Development:</u> Utilizing business and industry, math, English, science, and technology standards, introduces concepts of Design and Development Technologies: Design Process, Teamwork and Project Management, Marketing, Technical Applications, Modeling, Materials and Quality Assurance.	
<b>Program Type:</b> 5	
<b>Size Requirements:</b> 4,500 SF Lab	
<b>Lab Requirements:</b>	
	Spec. Ref #
<u>FINISHES:</u>	
<u>Flooring:</u>	
<b>Sealed</b> concrete	033000
<u>Ceiling:</u>	
Painted, exposed structure	099100
<u>Walls:</u>	
Painted concrete masonry units	042000/ 099100
<u>LOOSE FURNISHINGS:</u>	
(12) Workbenches with heavy-duty metal tops	
(24) Stools or chairs	
Wastebasket	
<u>Electronic Safety and Security:</u>	
Life safety devices per code	283111
<u>Miscellaneous:</u>	
<b>Pencil sharpener (optional)</b>	
<u>FEATURES<sup>1</sup>:</u>	
<u>Fixed Items:</u>	
<b>24' of chalk/marker board, tack board, or tackable wall surface</b>	101100
24' of tall storage cabinets	123550
Pencil sharpener support ( <b>optional</b> )	062000
(3) Paper towel dispensers	102813
12'x14' motorized overhead sectional door to exterior	083613
3'x7' hollow metal service door to exterior	081113
Steel bollards at overhead door, both sides	055000
<u>Fire Suppression:</u>	
Fire suppression system	211000
<u>Plumbing:</u>	
1 washfountain (minimum)	224000
2 utility sinks (minimum)	224000
2 hose bibbs (minimum)	224000
Safety shower/eyewash	224000
2 floor drains	224000
1 trench drain	224000
6 compressed air connections	221500
Plumbing connections	221116/221119/224000
<u>HVAC:</u>	
Supply/return air system	Div. 23
Independent temperature control	230923
<u>Electrical:</u>	
High intensity lighting or fluorescent lighting	265100
Illumination level: See Table 8600-5	
Multilevel switching	262726
30 duplex receptacles (minimum)	262726
Double duplex receptacle adjacent to each data and video port	262726
(4) 220 volt receptacles	262726
208v 3-phase service	262726
480v 3-phase service	262726
Room safety push-button	262726
<u>Communications:</u>	
1 video port and video display device	271533/271543/274119
1 voice port and phone	271513/ <b>273123</b>
4 data ports	271513
Clock	275313
Central sound system	275123
<u>NOTES:</u>	
1. Finishes/Features: Refer to Chapter 9 for specification references.	

**01.0701 NATURAL RESOURCE MANAGEMENT  
CT-P5-1**

CHAPTER 6: CAREER-TECHNICAL SCHOOL

<b>PROGRAM DESCRIPTION:</b> Applies science to management and protection of renewable and non-renewable resources; includes fundamentals of land use, watersheds, wildlife, fisheries and forestry. Communications, business principles and leadership skill development are essential to the program.		<b>Spec. Ref.#</b>
<b>Program Type:</b> 5		
<b>Size Requirements:</b> 3,000 SF Lab		
Lab Requirements:		
	<b>Spec. Ref #</b>	
<b>FINISHES:</b>		
Flooring: <b>Sealed</b> concrete	033000	
Ceiling: Painted, exposed structure	099100	
Walls: Painted concrete masonry units	042000/ 099100	
<b>LOOSE FURNISHINGS:</b> (12) Workbenches with heavy-duty metal tops (24) Stools or chairs (2) Welding tables Wastebasket		
<b>Miscellaneous:</b> <b>Pencil sharpener (optional)</b>		
<b>SITE FEATURES:</b> Greenhouse – 1,000 SF	133413	
<ul style="list-style-type: none"> <li>▪ ½ earth flooring, ½ concrete flooring (with floor drains)</li> <li>▪ Minimum of one 8'x10' overhead door</li> <li>▪ Provide electrical, plumbing, and heating/ventilation systems as per greenhouse manufacturer's recommendations.</li> <li>▪ Minimum of 4 hose bibbs</li> <li>▪ Fire suppression system if required</li> </ul>		
		<b>FEATURES<sup>1</sup>:</b>
		<b>Fixed Items:</b>
		<b>24' of chalk/marker board, tack board, or tackable wall surface</b> 101100
		24' of tall storage cabinets 123550
		Pencil sharpener support ( <i>optional</i> ) 062000
		(3) Paper towel dispensers 102813
		12'x14' motorized overhead sectional door to exterior 083613
		3'x7' hollow metal service door to exterior 081113
		Steel bollards at overhead door, both sides 055000
		<b>Fire Suppression:</b>
		Fire suppression system 211000
		<b>Plumbing:</b>
		1 washfountain (minimum) 224000
		2 utility sinks (minimum) 224000
		2 hose bibbs (minimum) 224000
		Safety shower/eyewash 224000
		2 floor drains 224000
		1 trench drain 224000
		6 compressed air connections 221500
		4 natural gas connections 226313
		Master gas shut-off valve 226313
		Plumbing connections 221116/221119/224000
		<b>HVAC:</b>
		Supply/return air system Div. 23
		Independent temperature control 230923
		Welding hood and exhaust Div. 23
		<b>Electrical:</b>
		High intensity lighting or fluorescent lighting 265100
		Illumination level: See Table 8600-5
		Multilevel switching 262726
		30 duplex receptacles (minimum) 262726
		Double duplex receptacle adjacent to each data and video port 262726
		(4) 220 volt receptacles 262726
		<b>Communications:</b>
		1 video port and video display device 271533/271543/274119
		1 voice port and phone 271513/ <b>273123</b>
		4 data ports 271513
		Clock 275313
		Central sound system 275123
		<b>Electronic Safety and Security:</b>
		Life safety devices per code 283111

**NOTES:**

1. Finishes/Features: Refer to Chapter 9 for specification references.

**17.1007 PLUMBING AND PIPEFITTING  
CT-P5-1**

CHAPTER 6: CAREER-TECHNICAL SCHOOL

<p><b><u>PROGRAM DESCRIPTION:</u></b> Specialized classroom and laboratory experiences concerned with layout, assembly, installation, alteration, and repair of piping systems and related fixtures and fittings. Included is instruction in the use of pipe-cutting, bending, grooving, and threading tools; the maintenance and use of welding, soldering, and brazing equipment; the care and safe use of hand and power tools and equipment; and the reading, interpretation, and application of blueprints and piping diagrams.</p> <p><b>Program Type:</b> 5</p> <p><b>Size Requirements:</b> 3,000 SF Lab</p> <p>Lab Requirements:</p> <table style="width: 100%; border: none;"> <tr> <td style="width: 80%;"></td> <td style="text-align: right; vertical-align: bottom;"><b>Spec. 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Ref.#</b>	<b>24' of chalk/marker board, tack board, or tackable wall surface</b>	101100	24' of tall storage cabinets	123550	Pencil sharpener support ( <i>optional</i> )	062000	(3) Paper towel dispensers	102813	12'x14' motorized overhead sectional door to exterior	083613	3'x7' hollow metal service door to exterior	081113	Steel bollards at overhead door, both sides	055000	Fire suppression system	211000	1 washfountain (minimum)	224000	2 utility sinks (minimum)	224000	2 hose bibbs (minimum)	224000	Safety shower/eyewash	224000	2 floor drains	224000	1 trench drain	224000	6 compressed air connections	221500	6 natural gas connections	226313	Master gas shut-off valve	226313	Plumbing connections	221116/221119/224000	Supply/return air system	Div. 23	Independent temperature control	230923	Welding hood and exhaust	Div. 23	Individual exhaust system for each gas-fired piece of equipment	Div. 23	High intensity lighting or fluorescent lighting	265100	Illumination level: See Table 8600-5		Multilevel switching	262726	30 duplex receptacles (minimum)	262726	Double duplex receptacle adjacent to each data and video port	262726	(6) 220 volt receptacles	262726	Room safety push-button	262726	1 video port and video display device	271533/271543/274119	1 voice port and phone	271513/ <b>273123</b>	4 data ports	271513	Clock	275313	Central sound system	275123
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Master gas shut-off valve	226313																																																																																
Plumbing connections	221116/221119/224000																																																																																
Supply/return air system	Div. 23																																																																																
Independent temperature control	230923																																																																																
Welding hood and exhaust	Div. 23																																																																																
Individual exhaust system for each gas-fired piece of equipment	Div. 23																																																																																
High intensity lighting or fluorescent lighting	265100																																																																																
Illumination level: See Table 8600-5																																																																																	
Multilevel switching	262726																																																																																
30 duplex receptacles (minimum)	262726																																																																																
Double duplex receptacle adjacent to each data and video port	262726																																																																																
(6) 220 volt receptacles	262726																																																																																
Room safety push-button	262726																																																																																
1 video port and video display device	271533/271543/274119																																																																																
1 voice port and phone	271513/ <b>273123</b>																																																																																
4 data ports	271513																																																																																
Clock	275313																																																																																
Central sound system	275123																																																																																

**NOTES:**

1. Finishes/Features: Refer to Chapter 9 for specification references.

**17.3100 POWER EQUIPMENT TECHNOLOGY  
CT-P5-1**

CHAPTER 6: CAREER-TECHNICAL SCHOOL

<b><u>PROGRAM DESCRIPTION:</u></b>		<b>Spec.</b>
Training in this program focuses on 2 and 4 cycle gasoline powered engines and their use in outdoor power and recreational equipment. This includes the basic service and preventative maintenance of equipment.		<b>Ref.#</b>
<b>Program Type:</b>	5	
<b>Size Requirements:</b>	3,500 SF Lab	
<b>Lab Requirements:</b>		
<b><u>FINISHES:</u></b>	<b>Spec.</b>	
	<b>Ref #</b>	
<b>Flooring:</b>		
<b>Sealed</b> concrete	033000	
<b>Ceiling:</b>		
Painted, exposed structure	099100	
<b>Walls:</b>		
Painted concrete masonry units	042000/ 099100	
<b><u>LOOSE FURNISHINGS:</u></b>		
(12) Workbenches with heavy-duty metal tops		
(24) Stools or chairs		
(2) Welding tables		
Wastebasket		
<b><u>Electronic Safety and Security:</u></b>		
Life safety devices per code	283111	
<b><u>Miscellaneous:</u></b>		
<b>Pencil sharpener (optional)</b>		
<b><u>FEATURES<sup>1</sup>:</u></b>		
<b><u>Fixed Items:</u></b>		
<b>24' of chalk/marker board, tack board, or tackable wall surface</b>		101100
24' of tall storage cabinets		123550
Pencil sharpener support ( <i>optional</i> )		062000
(4) Paper towel dispensers		102813
12'x14' motorized overhead sectional door to exterior		083613
3'x7' hollow metal service door to exterior		081113
Steel bollards at overhead door, both sides		055000
<b><u>Fire Suppression:</u></b>		
Fire suppression system		211000
<b><u>Plumbing:</u></b>		
2 washfountains (minimum)		224000
2 utility sinks (minimum)		224000
2 hose bibbs (minimum)		224000
Safety shower/eyewash		224000
4 floor drains		224000
1 trench drain		224000
6 compressed air connections		221500
Plumbing connections		221116/221119/224000
<b><u>HVAC:</u></b>		
Supply/return air system		Div. 23
Independent temperature control		230923
Welding hood and exhaust		Div. 23
<b><u>Electrical:</u></b>		
High intensity lighting or fluorescent lighting		265100
Illumination level: See Table 8600-5		
Multilevel switching		262726
30 duplex receptacles (minimum)		262726
Double duplex receptacle adjacent to each data and video port		262726
(6) 220 volt receptacles		262726
<b><u>Communications:</u></b>		
1 video port and video display device		271533/271543/274119
1 voice port and phone		271513/ <b>273123</b>
4 data ports		271513
Clock		275313
Central sound system		275123

**NOTES:**

1. Finishes/Features: Refer to Chapter 9 for specification references.

**17.1402 POWER TRANSMISSION  
CT-P5-1**

CHAPTER 6: CAREER-TECHNICAL SCHOOL

<p><b><u>PROGRAM DESCRIPTION:</u></b> Specialized classroom and laboratory experiences concerned with erecting and maintaining power lines and circuits for transmission and distribution of electrical power, and assembling and erecting related equipment and structures.</p>	<p><b><u>FEATURES<sup>1</sup>:</u></b> <b><u>Fixed Items:</u></b></p>	<p>Spec. <u>Ref.#</u></p>
<p><b>Program Type:</b> 5</p>	<p><b>24' of chalk/marker board, tack board, or tackable wall surface</b> 101100</p>	
<p><b>Size Requirements:</b> 3,500 SF Lab</p>	<p>24' of tall storage cabinets 123550</p>	
<p><b>Lab Requirements:</b></p>	<p>Pencil sharpener support (<i>optional</i>) 062000</p>	
<p><b><u>FINISHES:</u></b> <b><u>Flooring:</u></b> <b>Sealed</b> concrete Spec. Ref # 033000</p>	<p>(4) Paper towel dispensers 102813</p>	
<p><b><u>Ceiling:</u></b> Painted, exposed structure 099100</p>	<p>12'x14' motorized overhead sectional door to exterior 083613</p>	
<p><b><u>Walls:</u></b> Painted concrete masonry units 042000/ 099100</p>	<p>3'x7' hollow metal service door to exterior 081113</p>	
<p><b><u>LOOSE FURNISHINGS:</u></b> (12) Workbenches with heavy-duty metal tops (24) Stools or chairs Wastebasket</p>	<p>Steel bollards at overhead door, both sides 055000</p>	
<p><b><u>Miscellaneous:</u></b> <b>Pencil sharpener (optional)</b></p>	<p>Provide (6) holes in floor to accommodate utility poles. Provide removable metal covers when not in use.</p>	
	<p><b><u>Fire Suppression:</u></b> Fire suppression system 211000</p>	
	<p><b><u>Plumbing:</u></b> 1 washfountain (minimum) 224000 2 utility sinks (minimum) 224000 2 hose bibbs (minimum) 224000 Safety shower/eyewash 224000 2 floor drains 224000 1 trench drain 224000 6 compressed air connections 221500 Plumbing connections 221116/221119/224000</p>	
	<p><b><u>HVAC:</u></b> Supply/return air system Div. 23 Independent temperature control 230923</p>	
	<p><b><u>Electrical:</u></b> High intensity lighting or fluorescent lighting 265100 Illumination level: See Table 8600-5 Multilevel switching 262726 30 duplex receptacles (minimum) 262726 Double duplex receptacle adjacent to each data and video port 262726</p>	
	<p><b><u>Communications:</u></b> 1 video port and video display device 271533/271543/274119 1 voice port and phone 271513/<b>273123</b> 4 data ports 271513 Clock 275313 Central sound system 275123</p>	
	<p><b><u>Electronic Safety and Security:</u></b> Life safety devices per code 283111</p>	

**NOTES:**

1. Finishes/Features: Refer to Chapter 9 for specification references.

**17.2306 WELDING and CUTTING  
CT-P5-1**

CHAPTER 6: CAREER-TECHNICAL SCHOOL

<b>PROGRAM DESCRIPTION:</b> Utilizing business and industry, math, science, and technology standards, introduces concepts of metal welding, brazing, and flame cutting.		<b>Spec. Ref.#</b>
<b>Program Type:</b> 5		
<b>Size Requirements:</b> 3,500 SF Lab		
<b>Lab Requirements:</b>		
<b>FINISHES:</b>	<b>Spec. Ref #</b>	
Flooring: <b>Sealed</b> concrete	033000	
Ceiling: Painted, exposed structure	099100	
Walls: Painted concrete masonry units	042000/ 099100	
<b>LOOSE FURNISHINGS:</b> (20) Welding tables with heavy-duty metal tops (24) Stools or chairs (4) 4'x4' metal worktables (1) Steel tube storage rack (1) Sheet steel storage rack Wastebasket		
<b>Electronic Safety and Security:</b> Life safety devices per code	283111	
<b>Miscellaneous:</b> <b>Pencil sharpener (optional)</b> The following item may be funded by the school district: Overhead hoist crane		
	<b>FEATURES<sup>1</sup>:</b> <b>Fixed Items:</b> <b>24' of chalk/marker board, tack board, or tackable wall surface</b> 101100 24' of tall storage cabinets 123550 Pencil sharpener support ( <i>optional</i> ) 062000 (3) Paper towel dispensers 102813 12'x14' motorized overhead sectional door to exterior 083613 3'x7' hollow metal service door to exterior 081113 Steel bollards at overhead door, both sides 055000	
	<b>Fire Suppression:</b> Fire suppression system 211000	
	<b>Plumbing:</b> 1 washfountain (minimum) 224000 2 utility sinks (minimum) 224000 2 hose bibbs (minimum) 224000 Safety shower/eyewash 224000 2 floor drains 224000 1 trench drain 224000 6 compressed air connections 221500 Plumbing connections 221116/221119/224000	
	<b>HVAC:</b> Supply/return air system Div. 23 Independent temperature control 230923 Welding hood and exhaust Div. 23	
	<b>Electrical:</b> High intensity lighting or fluorescent lighting 265100 Illumination level: See Table 8600-5 Multilevel switching 262726 30 duplex receptacles (minimum) 262726 Double duplex receptacle adjacent to each data and video port 262726 (6) 220 volt receptacles 262726 480v 3-phase service 262726 Room safety push-button 262726	
	<b>Communications:</b> 1 video port and video display device 271533/271543/274119 1 voice port and phone 271513/ <b>273123</b> 4 data ports 271513 Clock 275313 Central sound system 275123	

**NOTES:**

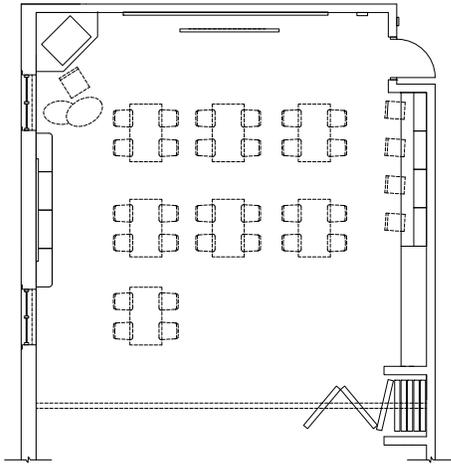
1. Finishes/Features: Refer to Chapter 9 for specification references.

**17.2306 WELDING AND CUTTING  
CT-P5-1**

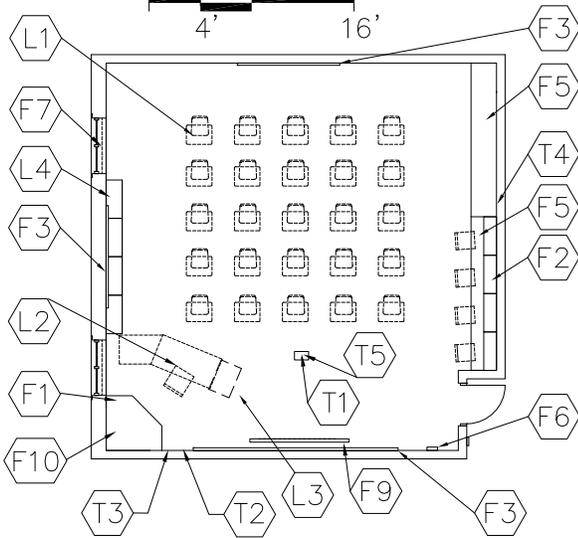
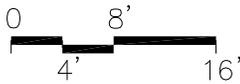
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**RELATED CLASSROOM  
CT-P5-2**

**CHAPTER 6: CAREER-TECHNICAL HIGH SCHOOL**



CLASSROOM WITH OPTIONAL FOLDING WALL



TYPICAL CLASSROOM

**CAPACITY:** 25 students  
**SIZE:** 900 SF

**PROGRAM ACTIVITIES:**

- Large group, small group, and individual instruction
- Group and individual work
- Demonstrations
- Accommodates any of the core academic disciplines

**SPATIAL RELATIONSHIPS:**

- Near other related lab
- Near teacher prep area/workroom
- Classrooms should be located in academic "zone" that is away from noisy or public activities
- Classrooms with access to media center and administrative services
- Flexibility of space
- Proximity to main corridor to accommodate other students without interrupting lab

**ENVIRONMENTAL CONSIDERATIONS:**

- **Required: View glass – minimum 5% without daylighting design; minimum 3% with daylighting design.**  
**Recommended: Daylighting design with glazing area determined by design solution.**
- Environmental sound control -  
wall **only** minimum STC 45  
ceiling minimum CAC 35, NRC 0.70

**NOTES:**

1. Loose furnishings shown represent one of many possible arrangements.
2. Depending upon the educational program of the district, a tall wardrobe may be placed in this classroom or could be placed in a teacher prep area/workroom.

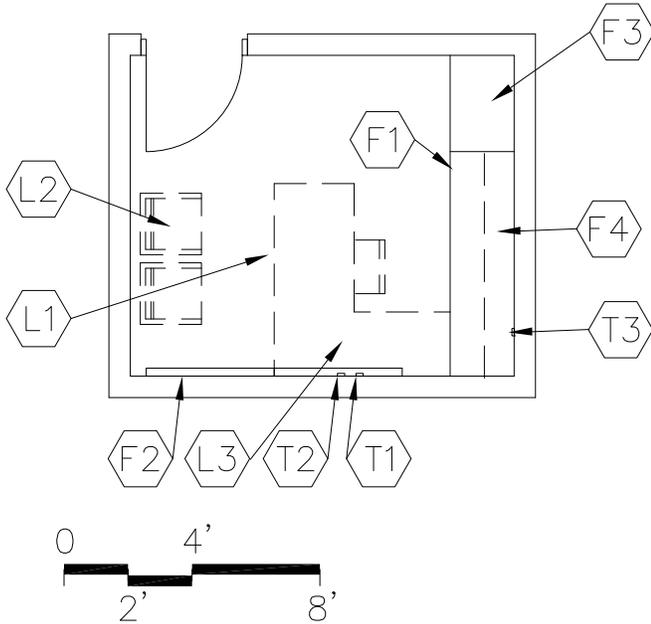
**RELATED CLASSROOM  
CT-P5-2**
**CHAPTER 6: CAREER-TECHNICAL HIGH SCHOOL**

<u>FINISHES<sup>1</sup>:</u>	Spec. Ref.#	<u>FEATURES<sup>1</sup>:</u>	Spec. Ref.#
<u>Flooring:</u>		<u>Fixed Items:</u>	
Carpet <b>or carpet tile</b>	096816	F1 Tall wardrobe with file drawers	123550
Optional: linoleum, ET, or sheet vinyl	096516 096500 <b>096813</b>	F2 Computer work surface (could be loose)	123550
<u>Base:</u>		F3 <b>20'-32' of chalk/marker board, tack board, or tackable wall surface</b>	101100
Resilient base	096500	F4 <b>Reserved</b>	
<u>Ceiling:</u>		F5 <b>8'-22' of base &amp; wall cabinets</b>	123550
Suspended, acoustical	095113	F6 Pencil sharpener support ( <b>optional</b> )	062000
<u>Walls:</u>		F7 Windows with integral blinds	085113
Painted concrete masonry units	042000/099100	F8 <b>Reserved</b>	
		F9 Projection screen (optional)	115213
		F10 Technology support casework	123550
<u>LOOSE FURNISHINGS:</u>		<u>Fire Suppression:</u>	
L1 Student desks and chairs		Fire suppression system	211000
L2 Teacher desk or workstation/computer support and chair		<u>Plumbing:</u>	
L3 File cabinet		N/A	
L4 9' of low bookcases (fixed or mobile) Wastebasket		<u>HVAC:</u>	
		Supply/return air system	Div. 23
		Independent temperature control	230923
<u>Miscellaneous:</u>		<u>Electrical:</u>	
<b>Pencil sharpener (optional)</b>		Fluorescent lighting:	265100
M1 Operable partitions between classrooms are optional	102226	Illumination level: See Table 8600-5	
		Multilevel switching	262726
		4 duplex receptacles	262726
		Double duplex receptacle adjacent to each data and video port	262726
		<u>Communications:</u>	
		T1 1 video port	271533/271543
		T2 1 voice port and phone	271513/ <b>273123</b>
		T3 1 data port near teacher workstation	271513
		T4 4 data ports (minimum) for <b>classroom technology</b>	271513
		Clock	275313
		Central sound system	275123
		Sound reinforcement system	275127
		T5 Overhead projector	274119
		<u>Electronic Safety and Security:</u>	
		Life safety devices per code	283111

**NOTES:**

1. Finishes/Features: Refer to Chapter 9 for specification references.
2. Technology components may be placed in a separate small cabinet, or integrated in the other casework in the room.
3. Where appropriate, some casework may be mobile to add flexibility and become part of the loose furnishings.

**CHAPTER 6: CAREER-TECHNICAL SCHOOL**



**PROGRAM ACTIVITIES:**

- Private space for program instructor
- One-on-one conferences with academic instructors, students, etc.

**SPATIAL RELATIONSHIPS:**

- Near related lab
- Direct access to school circulation areas

**ENVIRONMENTAL CONSIDERATIONS:**

- Environmental sound control -  
wall minimum STC 45  
ceiling minimum CAC 35, NRC 0.70

**CAPACITY:** 1 - 3 persons  
**SIZE:** 120 SF

**NOTES:**

1. Loose furnishings shown represent one of many possible arrangements.

**OFFICE  
CT-P5-3**

## CHAPTER 6: CAREER-TECHNICAL SCHOOL

<u>FINISHES<sup>1</sup>:</u>	Spec. Ref.#	<u>FEATURES<sup>1</sup>:</u>	Spec. Ref.#
Flooring:		<u>Fixed Items:</u>	
Carpet or carpet tile	096816	F1 Work surface with file drawers	123550
	096813	F2 4' of tack board	101100
		or tackable wall surface	
Base:		F3 Tall wardrobe	123550
Resilient base	096500	F4 Wall cabinets above work surface	123550
Ceiling:		<u>Fire Suppression:</u>	
Suspended, acoustical	095113	Fire suppression system	211000
Walls:		<u>Plumbing:</u>	
Painted gypsum wallboard		N/A	
over metal studs	092116/099100		
<u>LOOSE FURNISHINGS:</u>		<u>HVAC:</u>	
L1 Desk and chair		Supply/return air system	Div. 23
L2 Visitor chairs		Independent temperature control	230923
L3 Computer desk return			
Wastebasket		<u>Electrical:</u>	
		Single level switching	262726
		Fluorescent lighting	265100
		Illumination level: See Table 8600-5	
		4 duplex receptacles	262726
		Double duplex receptacle adjacent	
		to data and video port	262726
		<u>Communications:</u>	
		T1 1 voice port and phone	271513/ <b>273123</b>
		T2 1 data port near workstation	271513
		T3 1 video port	271533/271543
		Central sound system	275123
		Clock	275313
		<u>Electronic Safety and Security:</u>	
		Life safety devices per code	283111
		<u>Miscellaneous:</u>	
		N/A	

NOTES:

1. Finishes/Features: Refer to Chapter 9 for specification references. Optional: moveable cabinets
2. Fixed casework and loose furnishings can also be all fixed casework or all loose furnishings.

**PROGRAM ACTIVITIES:**

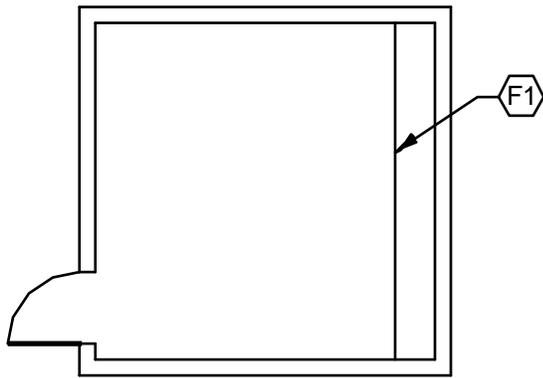
- Space for storage of lab equipment

**SPATIAL RELATIONSHIPS:**

- Near related lab

**ENVIRONMENTAL CONSIDERATIONS:**

N/A



CAPACITY:  
SIZE:

N/A  
200 SF

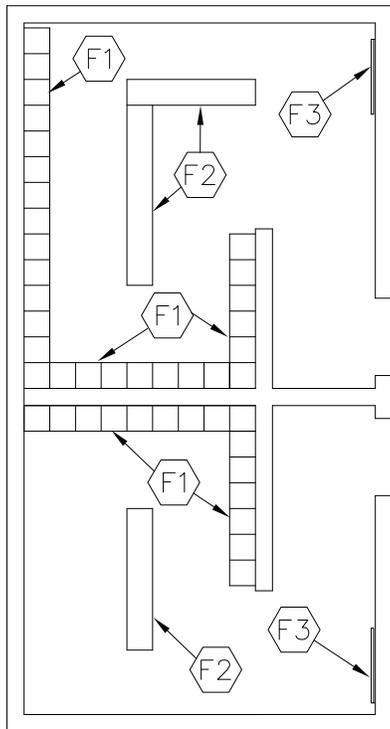
NOTES:

**STORAGE AREA  
CT-P5-4**
**CHAPTER 6: CAREER-TECHNICAL SCHOOL**

	Spec. Ref.#		Spec. Ref.#
<u>FINISHES<sup>1</sup>:</u>		<u>FEATURES<sup>1</sup>:</u>	
Flooring:		<u>Fixed Items<sup>1</sup>:</u>	
<b>Sealed</b> concrete	033000	F1 8'-20' of open shelving	
		Depth may vary (fixed or loose)	123550
Base:		<u>Fire Suppression:</u>	
Resilient base	096500	Fire suppression system	211000
Ceiling:		<u>Plumbing:</u>	
Exposed structure	---	N/A	
Walls:		<u>HVAC:</u>	
Painted concrete masonry units	042000/099100	To be determined by Design Professional	
		Supplemental heat as required	Div. 23
<u>LOOSE FURNISHINGS:</u>		<u>Electrical:</u>	
N/A		Single level switching	262726
		Fluorescent lighting	265100
		Illumination level: See Table 8600-5	
		Duplex receptacles	262726
		<u>Communications:</u>	
		N/A	
		<u>Electronic Safety and Security:</u>	
		Life safety devices per code	283111
		<u>Miscellaneous:</u>	
		N/A	

NOTES:

1. Finishes/Features: Refer to Chapter 9 for specification references.

**PROGRAM ACTIVITIES:**

- Personal and health needs for the program Specific users.
- Changing of clothes and/or uniforms.
- Storage of personal items while students are in lab.

**SPATIAL RELATIONSHIPS:**

- Adjacent to related lab

**ENVIRONMENTAL CONSIDERATIONS:**

- Sanitary and durable finishes.
- Environmental sound control  
Wall minimum STC 40  
Ceiling minimum CAC 35, NRC 0.70

CAPACITY: N/A  
SIZE: 9 SF per student (see Note 2)

**NOTES:**

1. Large and small changing areas are interchangeable for either males or females.  
Determination based on male/female ratio within each program.
2. Student count determined by total number of approved program spaces Types 5, 6, and 7 times 30.

**CHANGING ROOM  
CT-P5-4**
**CHAPTER 6: CAREER-TECHNICAL SCHOOL**

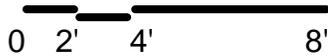
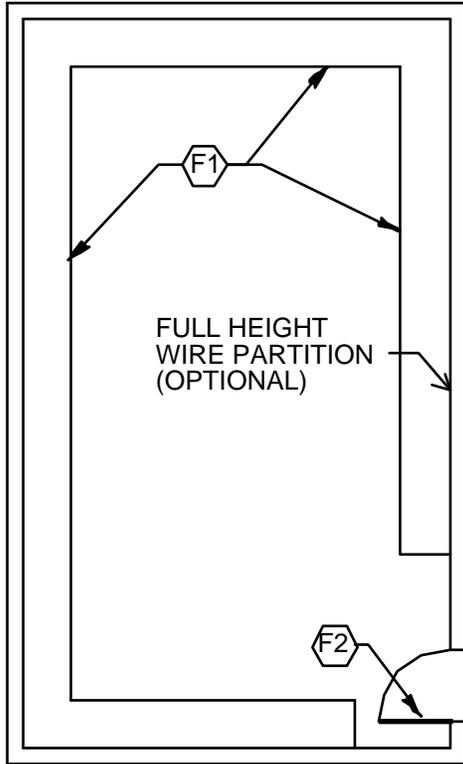
<u>FINISHES<sup>1</sup>:</u>	Spec. Ref.#	<u>FEATURES<sup>1</sup>:</u>	Spec. Ref.#
<u>Flooring:</u>		<u>Fixed Items<sup>1</sup>:</u>	
Polished concrete finishing, or colored concrete finishing	033510 033519	F1 Student lockers	105113
Optional: linoleum, or rubber	096500 096516	F2 Locker benches	062000
		F3 24" x 60" mirror	102813
<u>Base:</u>		<u>Fire Suppression:</u>	
Resilient base	096500	Fire suppression system	211000
<u>Ceiling:</u>		<u>Plumbing:</u>	
Suspended, acoustical with high impact hold down clips	095113	N/A	
<u>Walls:</u>		<u>HVAC:</u>	
Painted concrete masonry units	042000 / 099100	Supply/Return air system	Div. 23
		Exhaust air system	Div. 23
		Supplemental heat as required	Div. 23
		Individual temperature control	230923
<u>LOOSE FURNISHINGS</u>		<u>Electrical:</u>	
Wastebaskets		Single level switching	262726
		Fluorescent lighting	265100
		Illumination level: See Table 8600-6	
		2 Duplex receptacles	262726
		Means of egress lighting per code	265100
		<u>Communications:</u>	
		Clock	275313
		Central Sound System	275123
		<u>Electronic Safety and Security:</u>	
		Life safety devices per code	283111
		<u>Miscellaneous:</u>	
		N/A	

**NOTES:**

1. Finishes/Features: Refer to Chapter 9 for specification references.

**TOOL CRIB  
CT-P5-6**

CHAPTER 6: CAREER-TECHNICAL SCHOOL



**PROGRAM ACTIVITIES:**

- Storage of program related tools and instruments.
- Storage of students' tools.

**SPATIAL RELATIONSHIPS:**

- Adjacent to related lab

**ENVIRONMENTAL CONSIDERATIONS:**

- Sanitary and durable finishes

CAPACITY:  
SIZE:  
ANCILLARY SPACES:

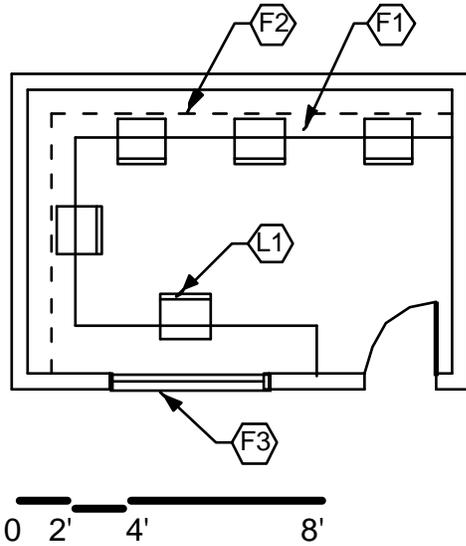
N/A  
550 SF

**TOOL CRIB**  
**CT-P5-6**
**CHAPTER 6: CAREER-TECHNICAL SCHOOL**

	Spec. Ref.#		Spec. Ref.#
<b><u>FINISHES</u><sup>1</sup>:</b>		<b><u>FEATURES</u><sup>1</sup>:</b>	
Flooring:		<b><u>Fixed Items</u><sup>1</sup>:</b>	
<b>Sealed</b> concrete	033000	F1 80' of open metal shelving (total), Depth may vary (fixed or loose)	105613
Optional: linoleum, or rubber	096500 096516	F2 Dutchdoor	105613
Base:		<b><u>Fire Suppression:</u></b>	
Resilient base	096500	Fire suppression system	211000
Ceiling:		<b><u>Plumbing:</u></b>	
Suspended, acoustical	095113	N/A	
Walls:		<b><u>HVAC:</u></b>	
Painted concrete masonry units	042000 / 099100	Exhaust air system	Div. 23
		Supplemental heat as required	Div. 23
<b><u>LOOSE FURNISHINGS</u></b>		<b><u>Electrical:</u></b>	
N/A		Single level switching	262726
		Fluorescent lighting	265100
		Illumination level: See Table 8600-5	
		4 Duplex receptacles	262726
		<b><u>Communications:</u></b>	
		N/A	
		<b><u>Electronic Safety and Security:</u></b>	
		Life safety devices per code	283111
		<b><u>Miscellaneous:</u></b>	
		N/A	

**NOTES:**

1. Finishes/Features: Refer to Chapter 9 for specification references.



PROGRAM ACTIVITIES:

- Individual computer research.
- Reference program specific manuals.
- Small group meetings.

SPATIAL RELATIONSHIPS:

- Adjacent to related lab

ENVIRONMENTAL CONSIDERATIONS:

- Sanitary and durable finishes
- Environmental sound control
  - Wall minimum STC 45
  - Ceiling minimum CAC 35, NRC 0.70

CAPACITY:  
SIZE:

N/A  
200 SF

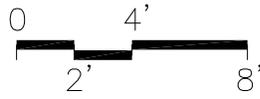
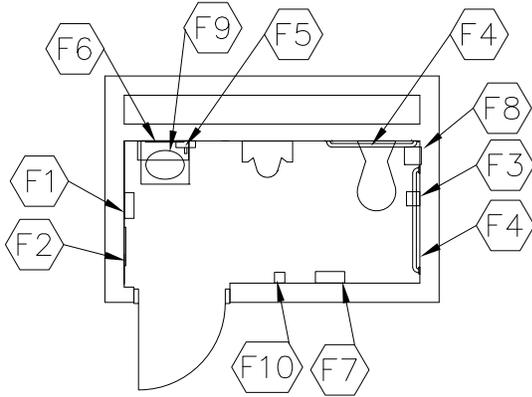
NOTES:

**REFERENCE ROOM  
CT-P5-7**
**CHAPTER 6: CAREER-TECHNICAL SCHOOL**

	Spec. Ref.#		Spec. Ref.#
<b><u>FINISHES<sup>1</sup>:</u></b>		<b><u>FEATURES<sup>1</sup>:</u></b>	
Flooring:		<b><u>Fixed Items:</u></b>	
<b>Sealed</b> concrete	033000	F1 34' of plastic lam. counter	062000
Base:		F2 27' of adjustable shelving	062000
Resilient base	096500	F3 Interior window	081113/088000
Ceiling:		<b><u>Fire Suppression:</u></b>	
Suspended, acoustical	095113	Fire suppression system	211000
Walls:		<b><u>Plumbing:</u></b>	
Painted concrete masonry units		N/A	
	042000 / 099100	<b><u>HVAC:</u></b>	
<b><u>LOOSE FURNISHINGS</u></b>		Supply/return air system	Div. 23
L3 Student chairs		Exhaust air system	Div. 23
Wastebasket		Supplemental heat as required	Div. 23
		<b><u>Electrical:</u></b>	
		Single level switching	262726
		Fluorescent lighting	265100
		Illumination level: See Table 8600-5	
		2 Duplex receptacles	262726
		Duplex receptacle adjacent to	
		Each data and video port	262726
		<b><u>Communications:</u></b>	
		T1 6 data ports	271513
		<b><u>Electronic Safety and Security:</u></b>	
		Life safety devices per code	283111
		<b><u>Miscellaneous:</u></b>	
		N/A	

**NOTES:**

1. Finishes/Features: Refer to Chapter 9 for specification references.



**PROGRAM ACTIVITIES:**

- Personal and health needs for the program
- Specific users
- Changing of clothes and/or uniforms.

**SPATIAL RELATIONSHIPS:**

- Adjacent to related lab

**ENVIRONMENTAL CONSIDERATIONS:**

- Sanitary and durable finishes.
- Environmental sound control  
 Wall minimum STC 48  
 Ceiling minimum CAC 35, NRC 0.70

CAPACITY:  
SIZE:

N/A  
68 SF

NOTES:

**TOILET ROOM**  
**CT-P5-8**
**CHAPTER 6: CAREER-TECHNICAL SCHOOL**

	Spec. Ref.#		Spec. Ref.#
<b><u>FINISHES<sup>1</sup>:</u></b>		<b><u>FEATURES<sup>1</sup>:</u></b>	
Sealed concrete	033000	<b><u>Fixed Items:</u></b>	
Optional: rubber	096500	F1 Towel dispenser	102813
Base:		F2 24" x 60" mirror	102813
Resilient base	096500	F3 Toilet tissue holder	102813
Ceiling:		F4 36" and 42" grab bars	102813
Suspended, acoustical	095113	F5 Soap dispenser	102813
Walls:		F6 16" x 24" mirror	102813
Painted concrete masonry units	042000 / 099100	F7 Sanitary product dispenser	102813
		F8 Sanitary product receptacle	102813
		F9 Stainless steel shelf (optional)	102813
		F10 Coat hook	102813
<b><u>LOOSE FURNISHINGS</u></b>		<b><u>Fire Suppression:</u></b>	
Wastebaskets		Fire suppression system	211000
		<b><u>Plumbing:</u></b>	
		Plumbing connections	221116/221119/224000
		<b><u>HVAC:</u></b>	
		Supply/return air system	Div. 23
		Exhaust air system	Div. 23
		Supplemental heat as required	Div. 23
		Individual temperature control	230923
		<b><u>Electrical:</u></b>	
		Single level switching	262726
		Fluorescent lighting	265100
		Illumination level: See Table 8600-5	
		2 Duplex receptacles	262726
		Means of egress lighting per code	265100
		<b><u>Communications:</u></b>	
		Clock	275313
		<b><u>Electronic Safety and Security:</u></b>	
		Life safety devices per code	283111
		<b><u>Miscellaneous:</u></b>	
		N/A	

**NOTES:**

1. Finishes/Features: Refer to Chapter 9 for specification references.

TABLE OF CONTENTS

A.	General Description .....	6316-3
B.	Program Example .....	6316-4
C.	Lab Plate Example .....	6316-5
D.	Lab Descriptions	
	▶ Agriculture / Industrial Equipment .....	6316-7
	Engine Storage .....	6316-8
	Flammable Material Storage .....	6316-9
	▶ Auto Collision Repair .....	6316-10
	Auto Parts Storage .....	6316-11
	▶ Auto Technology .....	6316-12
	Engine Storage .....	6316-13
	Machine Room .....	6316-14
	Flammable Material Storage .....	6316-15
	▶ Carpentry .....	6316-16
	Finishing Room .....	6316-17
	Material Storage .....	6316-18
	▶ Construction (2 clusters)	
	Construction – Design/Build .....	6316-19
	Construction – Management .....	6316-19
	Construction – CAD Room .....	6316-20
	▶ Engineering Technologies .....	6316-21
	CAD Room .....	6316-22
	▶ Food Science and Technology .....	6316-23
	Freezer .....	6316-24
	Cooler .....	6316-25
	Retail .....	6316-26
	▶ Horticulture .....	6316-27
	Retail .....	6316-28
	▶ Medium/Heavy Truck Technician .....	6316-29
	Engine Storage .....	6316-30
	Flammable Material Storage .....	6316-31
	Machine Room .....	6316-32
	▶ Precision Machining .....	6316-33
	CNC Room .....	6316-34
	Inspection Room .....	6316-35
	▶ Wood Product Technologies .....	6316-36
	Finishing Room .....	6316-37
	Material Storage .....	6316-38

**PROGRAM TYPE 6**

## CHAPTER 6: CAREER-TECHNICAL SCHOOL

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E.	Related Classroom Plate .....	6316-39
F.	Office Plate .....	6316-41
G.	Storage Area Plate .....	6316-43
H.	Changing Room Plate .....	6316-45
I.	Tool Crib Plate.....	6316-47
J.	Reference Room Plate .....	6316-49
K.	Toilet Room Plate .....	6316-51

**Program Type 6**

Description: Medium to large sized lab space with enhanced support space.

Lab space to be "high-bay" (18' min. clearance) with exposed building structure.

Lab to utilize standard construction with the following exception – lab floor slab to be 8" thick.

Support space to be finished with sealed concrete or vinyl composition tile, paint, and suspended acoustical ceiling. Lab may have possible site feature.

**Related classroom, office, changing room, reference room, and toilet room may be air-conditioned. Program specific spaces may be air-conditioned if the space is self-contained and curriculum and use require air-conditioning. High bay labs have no air-conditioning unless noted otherwise.**

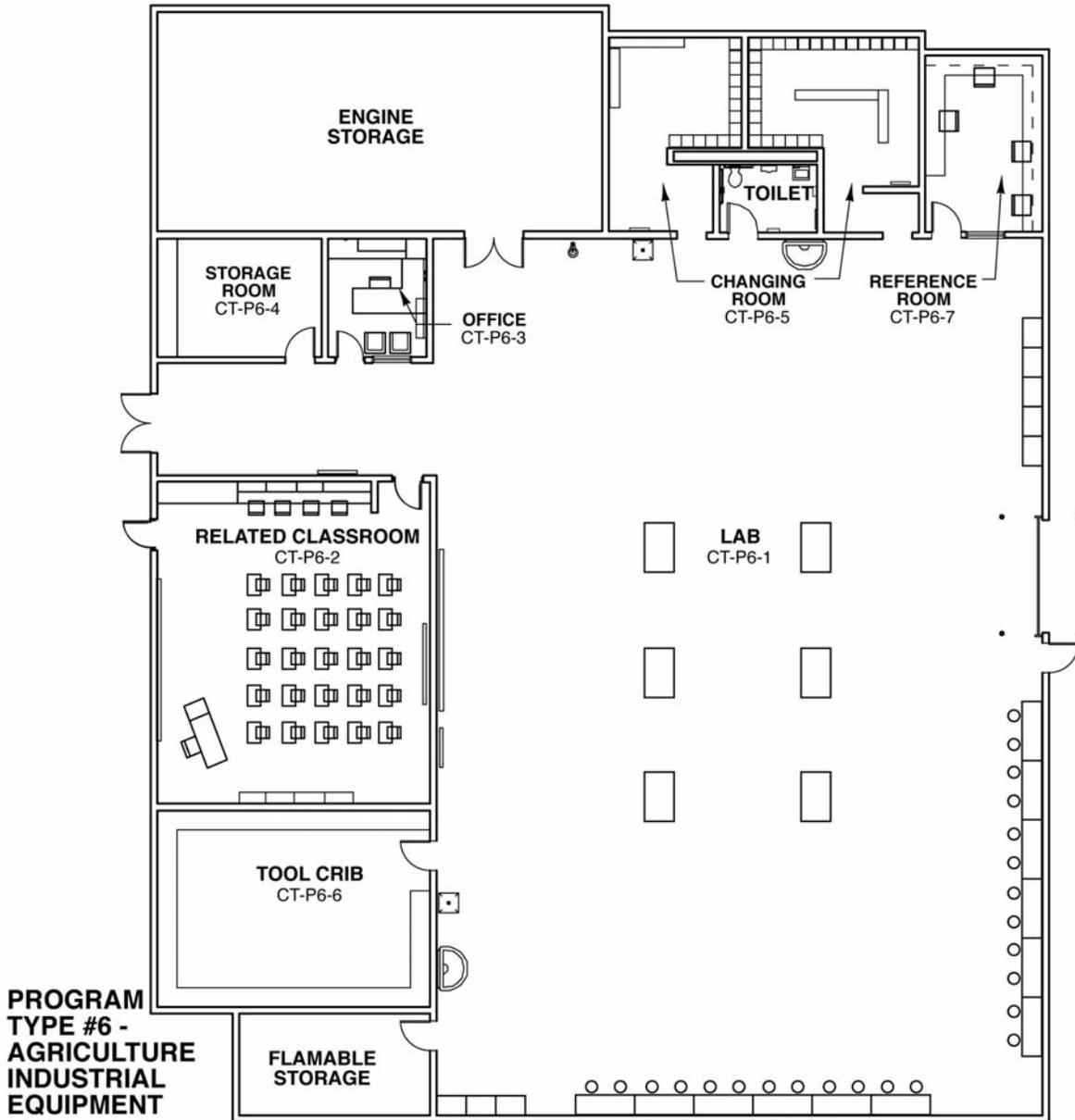
**NOTES:**

This is an example of how the Program Type 6 spaces in a career-technical school could be arranged. This is meant only to demonstrate the relationships between various spaces of this area.

Following are the Program Type 6 space plates:

CT-P6-1	Lab
CT-P6-2	Related Classroom
CT-P6-3	Office
CT-P6-4	Storage
CT-P6-5	Changing Room
CT-P6-6	Tool Crib
CT-P6-7	Reference Room
CT-P6-8	Toilet Room

**PROGRAM TYPE 6  
EXAMPLE**

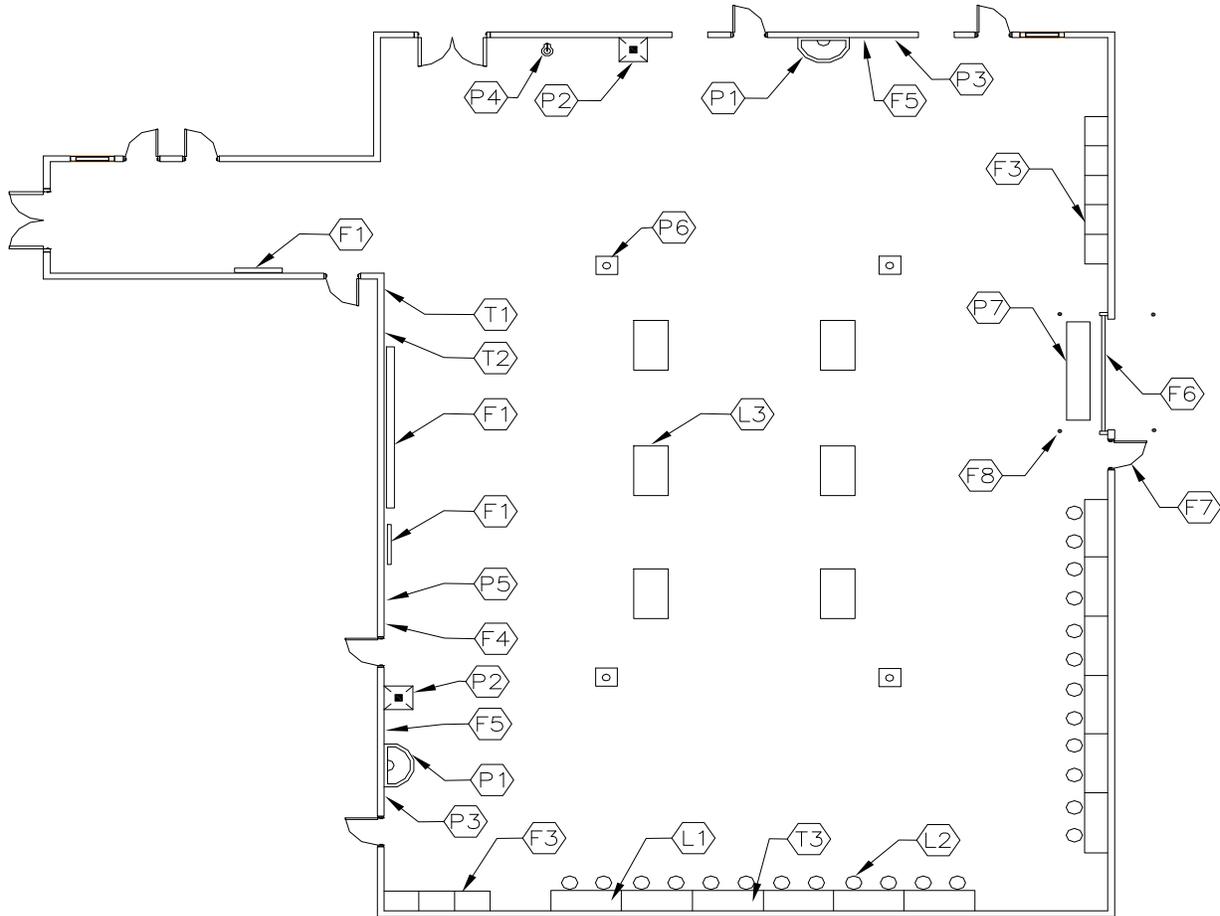


**Program Type 6**

This is an example to show the possible relationships of spaces for this program type.

**NOTES:**

1. See lab descriptions within this section for specific lab requirements.
2. See individual space plates at the end of this section for specific requirements.



CAPACITY:	24 Students
SIZE:	1,500 – 6,000 SF
	(see lab summaries for exact sizes)
ANCILLARY SPACES:	CT-P6-2 thru CT-P6-8

**NOTES:**

1. Loose furnishings shown represent one of many possible arrangements.
2. Graphic plate is an example only. Other labs within this program are not drawn – refer to lab summaries within this program type for information on a particular lab.

**LAB**  
**CT-P6-1**

CHAPTER 6: CAREER-TECHNICAL SCHOOL

PROGRAM ACTIVITIES:

- Large and small group instruction
- Group and individual work
- Demonstrations

SPATIAL RELATIONSHIPS:

- Near other related labs
- Adjacent to typical support spaces
- Proximity to large group restrooms
- Located away from noisy or public activities
- Proximity to core academic area and common use areas
- Flexibility of space

ENVIRONMENTAL CONSIDERATIONS:

- **Required: View glass – minimum 5% without daylighting design; minimum 3% with daylighting design.**  
**Recommended: Daylighting design with glazing area determined by design solution.**
- Environmental sound control -  
wall **only** minimum STC **45**  
ceiling minimum CAC 35, NRC 0.70

NOTES:

1. Finishes/Features: Refer to Chapter 9 for specification references.
2. Loose Furnishings: Refer to Lab Profiles within this section.
3. Loose Furnishings, fixed equipment, utility locations, and general footprint of room shown represent one of many possible arrangements.

**01.0201 AGRICULTURE / INDUSTRIAL EQUIPMENT**

CHAPTER 6: CAREER-TECHNICAL SCHOOL

**CT-P6-1**

<b><u>PROGRAM DESCRIPTION:</u></b>		<b>Spec. Ref.#</b>
Programs provide instruction in the operations or processes concerned with the selection, operation maintenance, and use of agricultural power, agricultural machinery and equipment, structures and utilities, soil and water management.		
<b>Program Type:</b>	6	
<b>Size Requirements:</b>	5,000 SF Lab	
Lab Requirements:		
<b><u>FINISHES:</u></b>	<b>Spec. Ref #</b>	
Flooring:		
<b>Sealed</b> concrete	033000	
Ceiling:		
Painted, exposed structure	099100	
Walls:		
Painted concrete masonry units	042000/ 099100	
<b><u>LOOSE FURNISHINGS:</u></b>		
L1 (12) Workbenches with heavy-duty metal tops		
L2 (24) Stools or chairs		
L3 (6) Welding tables		
Wastebasket		
<b><u>Electronic Safety and Security:</u></b>		
Life safety devices per code	283111	
<b><u>Miscellaneous:</u></b>		
<b>Pencil sharpener (optional)</b>		
<b><u>FEATURES<sup>1</sup>:</u></b>		
<b><u>Fixed Items:</u></b>		
F1	<b>24' of chalk/marker board, tack board, or tackable wall surface</b>	101100
F2	<b>Reserved</b>	
F3	24' of tall storage cabinets	123550
F4	Pencil sharpener support ( <b>optional</b> )	062000
F5	(4) Paper towel dispensers	102813
F6	12'x14' motorized overhead sectional door to exterior	083613
F7	3'x7' hollow metal service door to exterior	081113
F8	Steel bollards at overhead door, both sides	055000
	<b><u>Fire Suppression:</u></b>	
	Fire suppression system	211000
	<b><u>Plumbing:</u></b>	
P1	2 washfountains (minimum)	224000
P2	2 utility sinks (minimum)	224000
P3	2 hose bibbs (minimum)	224000
P4	Safety shower/eyewash	224000
P5	6 compressed air connections	221500
P6	4 floor drains	224000
P7	1 trench drain	224000
	Plumbing connections	221116/221119/224000
	<b><u>HVAC:</u></b>	
	Supply/return air system	Div. 23
	Independent temperature control	230923
	Welding hood and exhaust	Div. 23
	Vehicle exhaust system	Div. 23
	<b><u>Electrical:</u></b>	
	High intensity lighting or fluorescent lighting	265100
	Illumination level: See Table 8600-5	
	Multilevel switching	262726
	30 duplex receptacles (minimum)	262726
	Double duplex receptacle adjacent to each data and video port	262726
	(6) 220 volt receptacles	262726
	<b><u>Communications:</u></b>	
T1	1 video port and video display device	271533/271543/274119
T2	1 voice port and phone	271513/ <b>273123</b>
T3	4 data ports	271513
	Clock	275313
	Central sound system	275123

**NOTES:**

1. Finishes/Features: Refer to Chapter 9 for specification references.



01.0201 AGRICULTURE / INDUSTRIAL EQUIPMENT

CHAPTER 6: CAREER-TECHNICAL SCHOOL

**Flammable Material Storage**

<b>Program Type:</b> 6		<b>FEATURES<sup>1</sup>:</b>	Spec.
<b>Size Requirements:</b> 200 SF		<b>Fixed Items:</b>	<u>Ref.#</u>
		N/A	
<b>Requirements:</b>		<b>Fire Suppression:</b>	
		Fire suppression system	211000
<b>FINISHES:</b>		<b>Plumbing:</b>	
	Spec.	N/A	
	<u>Ref #</u>		
Flooring:		<b>HVAC:</b>	
<b>Sealed</b> concrete	033000	Supplemental heat as required	Div. 23
Ceiling:		Independent ventilation	Div. 23
Fire-rated gypsum wallboard	092113		
Walls:		<b>Electrical:</b>	
Painted concrete masonry units	042000/ 099100	Fluorescent lighting	265100
		Illumination level: See Table 8600-5	
		Single level switching	262726
		2 duplex receptacles	262726
<b>LOOSE FURNISHINGS:</b>		<b>Communications:</b>	
N/A		Central sound system	275123
<b>ENVIRONMENTAL CONSIDERATIONS:</b>		<b>Electronic Safety and Security:</b>	
<ul style="list-style-type: none"> <li>▪ Wall minimum STC 45</li> <li>▪ This room to be one-story (14'+/-) tall, located within high-bay program.</li> </ul>		Life safety devices per code	283111
		<b>Miscellaneous:</b>	
		N/A	

**NOTES:**

1. Finishes/Features: Refer to Chapter 9 for specification references.

**17.0301 AUTO COLLISION REPAIR  
CT-P6-1**

CHAPTER 6: CAREER-TECHNICAL SCHOOL

<b>PROGRAM DESCRIPTION:</b> Specialized learning experiences concerned with all phases of the repair of damaged vehicle bodies and frames. Areas of instruction may include: Painting and Refinishing, Mechanical/Electrical Repair, Structural and Non-Structural Repair.		<b>Spec. Ref.#</b>
<b>Program Type:</b> 6		<b>FEATURES<sup>1</sup>:</b>
<b>Size Requirements:</b> 5,000 SF Lab		<u>Fixed Items:</u>
Lab Requirements:		<b>24' of chalk/marker board, tack board, or tackable wall surface</b> 101100
		24' of tall storage cabinets 123550
		Pencil sharpener support ( <i>optional</i> ) 062000
		(4) Paper towel dispensers 102813
		12'x14' motorized overhead sectional door to exterior 083613
		3'x7' hollow metal service door to exterior 081113
		Steel bollards at overhead door, both sides 055000
		<u>Fire Suppression:</u>
		Fire suppression system 211000
		<u>Plumbing:</u>
		2 washfountains (minimum) 224000
		2 utility sinks (minimum) 224000
		2 hose bibbs (minimum) 224000
		Safety shower/eyewash 224000
		8 compressed air connections 221500
		4 floor drains 224000
		1 trench drain 224000
		Plumbing connections 221116/221119/224000
		<u>HVAC:</u>
		Supply/return air system Div. 23
		Independent temperature control 230923
		<u>Electrical:</u>
		High intensity lighting or fluorescent lighting 265100
		Illumination level: See Table 8600-5
		Multilevel switching 262726
		30 duplex receptacles (minimum) 262726
		Double duplex receptacle adjacent to each data and video port 262726
		(4) 220 volt receptacles 262726
		<u>Communications:</u>
		1 video port and video display device 271533/271543/274119
		1 voice port and phone 271513/ <b>273123</b>
		4 data ports 271513
		Clock 275313
		Central sound system 275123
<b>FINISHES:</b>	<b>Spec. Ref #</b>	
Flooring:		
<b>Sealed</b> concrete	033000	
Ceiling:		
Painted, exposed structure	099100	
Walls:		
Painted concrete masonry units	042000/ 099100	
<b>LOOSE FURNISHINGS:</b>		
(6) Workbenches with heavy-duty metal tops		
(24) Stools or chairs		
Wastebasket		
<u>Electronic Safety and Security:</u>		
Life safety devices per code	283111	
<u>Miscellaneous:</u>		
<b>Pencil sharpener (optional)</b>		
<u>The following items are to be funded by the School District:</u>		
Car lifts		
Frame racks		

**NOTES:**

1. Finishes/Features: Refer to Chapter 9 for specification references.

**17.0301 AUTO COLLISION REPAIR  
Auto Parts Storage**

## CHAPTER 6: CAREER-TECHNICAL SCHOOL

		Spec. Ref.#
<b>Program Type:</b>	6	
<b>Size Requirements:</b>	300 SF	
<b>Requirements:</b>		
<u>FINISHES:</u>	Spec. Ref #	
Flooring:		
<b>Sealed</b> concrete	033000	
Ceiling:		
Suspended, acoustical	095113	
Walls:		
Painted concrete masonry units	042000/ 099100	
<u>LOOSE FURNISHINGS:</u>		
	N/A	
<u>ENVIRONMENTAL CONSIDERATIONS:</u>		
▪ Wall minimum STC 45		
▪ This room to be one-story (14'+/-) tall, located within high-bay program.		
		<u>FEATURES<sup>1</sup>:</u>
		<u>Fixed Items:</u>
		30' of heavy duty adjustable steel shelving
		105613
		<u>Fire Suppression:</u>
		Fire suppression system
		211000
		<u>Plumbing:</u>
		N/A
		<u>HVAC:</u>
		Supplemental heat as required
		Div. 23
		<u>Electrical:</u>
		Fluorescent lighting
		265100
		Illumination level: See Table 8600-5
		Single level switching
		262726
		4 duplex receptacles
		262726
		<u>Communications:</u>
		Central sound system
		275123
		<u>Electronic Safety and Security:</u>
		Life safety devices per code
		283111
		<u>Miscellaneous:</u>
		N/A

NOTES:

1. Finishes/Features: Refer to Chapter 9 for specification references.



**17.0302 AUTO TECHNOLOGY  
Engine Storage**

CHAPTER 6: CAREER-TECHNICAL SCHOOL

<p><b>Program Type:</b> 6</p> <p><b>Size Requirements:</b> 800 SF</p> <p>Requirements:</p> <p><u>FINISHES:</u> Flooring:     <b>Sealed</b> concrete</p> <p>Ceiling:     Suspended, acoustical     Option: painted, exposed structure</p> <p>Walls:     Painted concrete masonry units</p> <p><u>LOOSE FURNISHINGS:</u>     N/A</p> <p><u>ENVIRONMENTAL CONSIDERATIONS:</u></p> <ul style="list-style-type: none"> <li>▪ Wall minimum STC 45</li> <li>▪ This room to be one-story (14'+/-) tall, located within high-bay program.</li> </ul>	<p style="text-align: right;">Spec. Ref.#</p> <p><u>FEATURES<sup>1</sup>:</u> <u>Fixed Items:</u>     Pair of doors</p> <p><u>Fire Suppression:</u>     Fire suppression system</p> <p><u>Plumbing:</u>     N/A</p> <p><u>HVAC:</u>     Supplemental heat as required     Independent ventilation</p> <p><u>Electrical:</u>     Fluorescent lighting     Illumination level: See Table 8600-5     Single level switching     4 duplex receptacles</p> <p><u>Communications:</u>     Central sound system</p> <p><u>Electronic Safety and Security:</u>     Life safety devices per code</p> <p><u>Miscellaneous:</u>     N/A</p>
	<p>081113</p> <p>211000</p> <p>033000</p> <p>095113 099100</p> <p>042000/ 099100</p> <p>265100</p> <p>262726 262726</p> <p>275123</p> <p>283111</p>

NOTES:

1. Finishes/Features: Refer to Chapter 9 for specification references.

**17.0302 AUTO TECHNOLOGY  
Machine Room**

CHAPTER 6: CAREER-TECHNICAL SCHOOL

		Spec. Ref.#
<b>Program Type:</b>	6	
<b>Size Requirements:</b>	900 SF	
<b>Requirements:</b>		
<u>FINISHES:</u>	Spec. Ref #	
Flooring:		
<b>Sealed</b> concrete	033000	
Ceiling:		
Suspended, acoustical	095113	
Option: painted, exposed structure	099100	
Walls:		
Painted concrete masonry units	042000/ 099100	
<u>LOOSE FURNISHINGS:</u>		
(4) Work tables		
Wastebasket		
<u>ENVIRONMENTAL CONSIDERATIONS:</u>		
▪ Wall <b>only</b> minimum STC <b>45</b>		
▪ This room to be one-story (14' +/-) tall, located within high-bay program.		
		<u>FEATURES<sup>1</sup>:</u>
		<u>Fixed Items:</u>
		16' of tall cabinets 123550
		Paper towel dispenser 102813
		<u>Fire Suppression:</u>
		Fire suppression system 211000
		<u>Plumbing:</u>
		Utility sink 224000
		Plumbing connections 221116/221119/224000
		<u>HVAC:</u>
		Supplemental heat as required Div. 23
		Independent ventilation Div. 23
		<u>Electrical:</u>
		Fluorescent lighting 265100
		Illumination level: See Table 8600-5
		Single level switching 262726
		4 duplex receptacles 262726
		220 v service 262726
		<u>Communications:</u>
		Central sound system 275123
		<u>Electronic Safety and Security:</u>
		Life safety devices per code 283111
		<u>Miscellaneous:</u>
		N/A

NOTES:

1. Finishes/Features: Refer to Chapter 9 for specification references.

**17.0302 AUTO TECHNOLOGY  
Flammable Material Storage**

CHAPTER 6: CAREER-TECHNICAL SCHOOL

<b>Program Type:</b> 6	Spec. Ref #	<u>FEATURES<sup>1</sup>:</u>	Spec. Ref.#
<b>Size Requirements:</b> 60 SF		Fixed Items: 3' of heavy duty adjustable steel shelving	105613
<b>Requirements:</b>	<u>Fire Suppression:</u>	Fire suppression system	211000
<u>FINISHES:</u>	033000	<u>Plumbing:</u>	
Flooring:		N/A	
<b>Sealed</b> concrete		<u>HVAC:</u>	
Ceiling:	092113	Supplemental heat as required	Div. 23
Fire-rated gypsum drywall		Independent ventilation	Div. 23
Walls:	042000/ 099100	<u>Electrical:</u>	
Painted concrete masonry units		Fluorescent lighting	265100
<u>LOOSE FURNISHINGS:</u>		Illumination level: See Table 8600-5	
N/A		Single level switching	262726
<u>ENVIRONMENTAL CONSIDERATIONS:</u>		2 duplex receptacles	262726
<ul style="list-style-type: none"> <li>▪ Wall minimum STC 45</li> <li>▪ This room to be one-story (14'+/-) tall, located within high-bay program.</li> </ul>		<u>Communications:</u>	
		Central sound system	275123
		<u>Electronic Safety and Security:</u>	
		Life safety devices per code	283111
		<u>Miscellaneous:</u>	
		N/A	

NOTES:

1. Finishes/Features: Refer to Chapter 9 for specification references.

**17.1001 CARPENTRY  
CT-P6-1**

CHAPTER 6: CAREER-TECHNICAL SCHOOL

<b>PROGRAM DESCRIPTION:</b> Classroom and laboratory experiences involving the layout, construction, and repair of residential and commercial structures. Included is instruction in the care and use of power tools, equipment, and materials used in the construction process; floor, wall, ceiling, and roof framing; the installation of insulation and roofing; and interior and exterior finish detail.		<b>Spec. Ref.#</b>
<b>Program Type:</b> 6		
<b>Size Requirements:</b> 4,000 SF Lab		
Lab Requirements:		
	<b>Spec. Ref #</b>	
<b>FINISHES:</b>		
Flooring:		
<b>Sealed</b> concrete	033000	
Ceiling:		
Painted, exposed structure	099100	
Walls:		
Painted concrete masonry units	042000/ 099100	
<b>LOOSE FURNISHINGS:</b>		
(12) Workbenches with heavy-duty wooden tops		
(24) Stools or chairs		
Wastebasket		
<b>Miscellaneous:</b>		
<b>Pencil sharpener (optional)</b>		
		<b>FEATURES<sup>1</sup>:</b>
		<b>Fixed Items:</b>
		<b>24' of chalk/marker board, tack board, or tackable wall surface</b> 101100
		24' of tall storage cabinets 123550
		Pencil sharpener support ( <i>optional</i> ) 062000
		(3) Paper towel dispensers 102813
		12'x14' motorized overhead sectional door to exterior 083613
		3'x7' hollow metal service door to exterior 081113
		Steel bollards at overhead door, both sides 055000
		(2) Lumber storage racks 061000
		<b>Fire Suppression:</b>
		Fire suppression system 211000
		<b>Plumbing:</b>
		1 washfountain (minimum) 224000
		2 utility sinks (minimum) 224000
		2 hose bibbs (minimum) 224000
		Safety shower/eyewash 224000
		6 compressed air connections 221500
		2 floor drains 224000
		1 trench drain 224000
		Plumbing connections 221116/221119/224000
		<b>HVAC:</b>
		Supply/return air system Div. 23
		Independent temperature control 230923
		Dust collection system 233513
		<b>Electrical:</b>
		High intensity lighting or fluorescent lighting 265100
		Illumination level: See Table 8600-5
		Multilevel switching 262726
		30 duplex receptacles (minimum) 262726
		Double duplex receptacle adjacent to each data and video port 262726
		<b>Room safety push-button 262726</b>
		<b>Communications:</b>
		1 video port and video display device 271533/271543/274119
		1 voice port and phone 271513/ <b>273123</b>
		4 data ports 271513
		Clock 275313
		Central sound system 275123
		<b>Electronic Safety and Security:</b>
		Life safety devices per code 283111

**NOTES:**

1. Finishes/Features: Refer to Chapter 9 for specification references.

## CHAPTER 6: CAREER-TECHNICAL SCHOOL

CARPENTRY  
Finishing Room

		Spec. Ref.#
<b>Program Type:</b>	6	
<b>Size Requirements:</b>	500 SF	
<b>Requirements:</b>		
<u>FINISHES:</u>	Spec. Ref #	
Flooring:		
<b>Sealed</b> concrete	033000	
Ceiling:		
Suspended, acoustical	095113	
Walls:		
Painted concrete masonry units	042000/ 099100	
<u>LOOSE FURNISHINGS:</u>		
(2) Work tables		
<u>ENVIRONMENTAL CONSIDERATIONS:</u>		
▪ Wall <b>only</b> minimum STC <b>45</b>		
▪ This room to be one-story (14' +/-) tall, located within high-bay program.		
		<u>FEATURES<sup>1</sup>:</u>
		<u>Fixed Items:</u>
		16' of pegboard
		Pair of doors
		<u>Fire Suppression:</u>
		Fire suppression system
		<u>Plumbing:</u>
		N/A
		<u>HVAC:</u>
		Supplemental heat as required
		Independent ventilation
		<u>Electrical:</u>
		Fluorescent lighting
		Illumination level: See Table 8600-5
		Single level switching
		4 duplex receptacles
		<u>Communications:</u>
		Central sound system
		Clock
		<u>Electronic Safety and Security:</u>
		Life safety devices per code
		<u>Miscellaneous:</u>
		N/A

NOTES:

1. Finishes/Features: Refer to Chapter 9 for specification references.



**CONSTRUCTION (2 clusters)**  
**17.1805 Design/Build ▪ 17.1806 Management**  
**CT-P6-1**

CHAPTER 6: CAREER-TECHNICAL SCHOOL

<p><b><u>PROGRAM DESCRIPTION:</u></b>  <b>C-D/B:</b> Utilizes industry standards and a math, science, ELA, and technology framework to introduce concepts of designing, planning, managing, building and maintaining the built environment.  <b>C-M:</b> Classroom and laboratory experiences combining advanced academics and the skills and knowledge essential to the construction industry. Focus is on supervision, planning, and management of the construction process. The program will follow the state TCP and culminate in an associate degree.</p> <p><b>Program Type:</b> 6</p> <p><b>Size Requirements:</b> 3,000 SF Lab</p> <p><b>Lab Requirements:</b></p> <table style="width: 100%; border: none;"> <tr> <td style="width: 80%;"></td> <td style="text-align: right; vertical-align: top;"><u>Spec.</u> <u>Ref #</u></td> </tr> <tr> <td><b><u>FINISHES:</u></b></td> <td></td> </tr> <tr> <td>Flooring:</td> <td></td> </tr> <tr> <td style="padding-left: 20px;"><b>Sealed</b> concrete</td> <td style="text-align: right;">033000</td> </tr> <tr> <td>Ceiling:</td> <td></td> </tr> <tr> <td style="padding-left: 20px;">Painted, exposed structure</td> <td style="text-align: right;">099100</td> </tr> <tr> <td>Walls:</td> <td></td> </tr> <tr> <td style="padding-left: 20px;">Painted concrete masonry units</td> <td style="text-align: right;">042000/ 099100</td> </tr> <tr> <td colspan="2"> <b><u>LOOSE FURNISHINGS:</u></b></td> </tr> <tr> <td colspan="2">(12) Workbenches with 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connections	221500	2 floor drains	224000	1 trench drain	224000	Plumbing connections	221116/221119/224000	 <b><u>HVAC:</u></b>		Supply/return air system	Div. 23	Independent temperature control	230923	Welding hood and exhaust	233515	 <b><u>Electrical:</u></b>		High intensity lighting or fluorescent lighting	265100	Illumination level: See Table 8600-5		Multilevel switching	262726	30 duplex receptacles (minimum)	262726	Double duplex receptacle adjacent to each data and video port	262726	480v 3-phase service	262726	 <b><u>Communications:</u></b>		1 video port and video display device	271533/271543/274119	1 voice port and phone	271513/ <b>273123</b>	4 data ports	271513	Clock	275313	Central sound system	275123
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**NOTES:**

1. Finishes/Features: Refer to Chapter 9 for specification references.
2. This lab may be air-conditioned.

**CONSTRUCTION (2clusters)**  
**17.1805 Design/Build ▪ 17.1806 Management**  
**CAD Room**

## CHAPTER 6: CAREER-TECHNICAL SCHOOL

		Spec. Ref.#
<b>Program Type:</b>	6	
<b>Size Requirements:</b>	400 SF	
<b>Requirements:</b>		
<u>FINISHES:</u>	Spec. Ref #	
Flooring:		
ET, rubber,	096500	
sheet vinyl, or linoleum	096516	
Base:		
Resilient	096500	
Ceiling:		
Suspended acoustical	095113	
Walls:		
Painted concrete masonry units	042000/ 099100	
<u>LOOSE FURNISHINGS:</u>		
(10) 2-person tables		
(20) Student chairs		
(1) Teacher station & chair		
Wastebasket		
<u>ENVIRONMENTAL CONSIDERATIONS:</u>		
▪ Wall <b>only</b> minimum STC <b>45</b>		
▪ This room to be one-story (14'+/-) tall, located within high-bay program.		
		<u>FEATURES<sup>1</sup>:</u>
		<u>Fixed Items:</u>
		6' of chalk/marker board 101100
		8' of tall storage cabinets 123550
		Projection screen, 6'x8' 115213
		<u>Fire Suppression:</u>
		Fire suppression system 211000
		<u>Plumbing:</u>
		N/A
		<u>HVAC:</u>
		Supply/return air system Div. 23
		Independent temperature control 230923
		<u>Electrical:</u>
		Fluorescent lighting, parabolic lenses:265100
		Illumination level: See Table 8600-5
		Single level switching 262726
		4 duplex receptacles 262726
		Double duplex receptacle adjacent to each data port 262726
		<u>Communications:</u>
		1 data port near teacher workstation 271513
		22 data ports 271513
		Central sound system 275123
		Overhead projector 274119
		<u>Electronic Safety and Security:</u>
		Life safety devices per code 283111
		<u>Miscellaneous:</u>
		N/A

NOTES:

1. Finishes/Features: Refer to Chapter 9 for specification references.

## 17.1810 ENGINEERING TECHNOLOGIES

## CHAPTER 6: CAREER-TECHNICAL SCHOOL

## CT-P6-1

<b>PROGRAM DESCRIPTION:</b>		<b>FEATURES<sup>1</sup>:</b>		Spec.
		<b>Fixed Items:</b>		<u>Ref.#</u>
Combined with the first course in the pathway and utilizing business and industry technical standards and within a math, science, ELA, technology framework. Introduces concepts of engineering related to mechanical, electrical, and industrial engineering and leads to post-secondary education.		<b>24' of chalk/marker board, tack board, or tackable wall surface</b>		101100
<b>Program Type:</b> 6		24' of tall storage cabinets		123550
<b>Size Requirements:</b> 1,500 SF Lab		Pencil sharpener support ( <i>optional</i> )		062000
<b>Lab Requirements:</b>		(3) Paper towel dispensers		102813
		12'x14' motorized overhead sectional door to exterior		083613
		3'x7' hollow metal service door to exterior		081113
		Steel bollards at overhead door, both sides		055000
		<b>Fire Suppression:</b>		
		Fire suppression system		211000
		<b>Plumbing:</b>		
<b>FINISHES:</b>		1 washfountain (minimum)		224000
<u>Spec. Ref #</u>		2 utility sinks (minimum)		224000
Flooring:		2 hose bibbs (minimum)		224000
<b>Sealed</b> concrete		Safety shower/eyewash		224000
033000		6 compressed air connections		221500
Ceiling:		2 floor drains		224000
Painted, exposed structure		1 trench drain		224000
099100		Plumbing connections		221116/221119/224000
Walls:		<b>HVAC:</b>		
Painted concrete masonry units		Supply/return air system		Div. 23
042000/099100		Independent temperature control		230923
		Welding hood and exhaust		233515
<b>LOOSE FURNISHINGS:</b>		<b>Electrical:</b>		
(12) Workbenches with heavy-duty metal tops		High intensity lighting or fluorescent lighting		265100
(24) Stools or chairs		Illumination level: See Table 8600-5		
(4) Welding tables		Multilevel switching		262726
Wastebasket		30 duplex receptacles (minimum)		262726
		Double duplex receptacle adjacent to each data and video port		262726
<b>Electronic Safety and Security:</b>		(6) 220 volt receptacles		262726
Life safety devices per code		<b>Communications:</b>		
283111		1 video port and video display device		271533/271543/274119
<b>Miscellaneous:</b>		1 voice port and phone		271513/ <b>273123</b>
<b>Pencil sharpener (optional)</b>		4 data ports		271513
		Clock		275313
		Central sound system		275123

**NOTES:**

1. Finishes/Features: Refer to Chapter 9 for specification references.
2. This program has the option of being located in high bay or low bay (Type 3) space with associated features adjusted for the needs of the space, building type, and curriculum with OSFC approval.
3. This lab may be air-conditioned.

**17.1810 ENGINEERING TECHNOLOGIES  
CAD Room**

## CHAPTER 6: CAREER-TECHNICAL SCHOOL

		Spec. Ref.#
<b>Program Type:</b>	6	
<b>Size Requirements:</b>	400 SF	
<b>Requirements:</b>		
<u>FINISHES:</u>	Spec. Ref #	
Flooring:		
ET, rubber,	096500	
sheet vinyl, or linoleum	096516	
Base:		
Resilient	096500	
Ceiling:		
Suspended acoustical	095113	
Walls:		
Painted concrete masonry units	042000/ 099100	
<u>LOOSE FURNISHINGS:</u>		
(10) 2-person tables		
(20) Student chairs		
(1) Teacher station & chair		
Wastebasket		
<u>ENVIRONMENTAL CONSIDERATIONS:</u>		
▪ Wall <b>only</b> minimum STC <b>45</b>		
▪ This room to be one-story (14'+/-) tall, located within high-bay program.		
		<u>FEATURES<sup>1</sup>:</u>
		<u>Fixed Items:</u>
		6' of chalk/marker board 101100
		8' of tall storage cabinets 123550
		Projection screen, 6'x8' 115213
		<u>Fire Suppression:</u>
		Fire suppression system 211000
		<u>Plumbing:</u>
		N/A
		<u>HVAC:</u>
		Supply/return air system Div. 23
		Independent temperature control 230923
		<u>Electrical:</u>
		Fluorescent lighting, parabolic lenses:265100
		Illumination level: See Table 8600-5
		Single level switching 262726
		4 duplex receptacles 262726
		Double duplex receptacle adjacent to each data port 262726
		<u>Communications:</u>
		1 data port near teacher workstation 271513
		22 data ports 271513
		Central sound system 275123
		Overhead projector 274119
		<u>Electronic Safety and Security:</u>
		Life safety devices per code 283111
		<u>Miscellaneous:</u>
		N/A

NOTES:

1. Finishes/Features: Refer to Chapter 9 for specification references.

**01.1001 FOOD SCIENCE AND TECHNOLOGY  
CT-P6-1**

CHAPTER 6: CAREER-TECHNICAL SCHOOL

<b>PROGRAM DESCRIPTION:</b> Applies principles of biology, chemistry, and physics to the research and development, production, processing, and distribution of food products meeting quality assurance standards in a system that is safe and secure.		<b>Spec. Ref.#</b>
<b>Program Type:</b> 6		
<b>Size Requirements:</b> 2,000 SF Lab		
<b>Lab Requirements:</b>		
<b>FINISHES:</b>	<b>Spec. Ref #</b>	
<b>Flooring:</b>		
<b>Sealed</b> concrete	033000	
Option: Epoxy, resinous flooring	096723	
<b>Ceiling:</b>		
Painted, exposed structure	099100	
<b>Walls:</b>		
Painted concrete masonry units	042000/ 099100	
Option: Fiberglass reinforced plastic panels		
<b>LOOSE FURNISHINGS:</b>		
(8) Workbenches with heavy-duty stainless steel tops		
(24) Stools or chairs (stainless steel)		
Wastebasket		
	<b>FEATURES<sup>1</sup>:</b>	
	<b>Fixed Items:</b>	
	<b>24' of chalk/marker board, tack board, or tackable wall surface</b>	101100
	Pencil sharpener support ( <i>optional</i> )	062000
	(3) Paper towel dispensers	102813
	12'x14' motorized overhead sectional door to exterior	083613
	3'x7' hollow metal service door to exterior	081113
	Steel bollards at overhead door, both sides	055000
	Overhead hoist system between lab, freezer, and cooler	412223
	<b>Fire Suppression:</b>	
	Fire suppression system	211000
	<b>Plumbing:</b>	
	1 washfountain (minimum)	224000
	2 utility sinks (minimum)	224000
	2 hose bibbs (minimum)	224000
	Safety shower/eyewash	224000
	2 floor drains	224000
	1 trench drain	224000
	Plumbing connections	221116/221119/224000
	<b>HVAC:</b>	
	Supply/return air system	Div. 23
	Independent temperature control	230923
	<b>Electrical:</b>	
	High intensity lighting or fluorescent lighting	265100
	Illumination level: See Table 8600-5	
	Multilevel switching	262726
	20 duplex receptacles (minimum)	262726
	Double duplex receptacle adjacent to each data and video port	262726
	(2) 220 volt receptacles	262726
	<b>Communications:</b>	
	1 video port and video display device	271533/271543/274119
	1 voice port and phone	271513/ <b>273123</b>
	4 data ports	271513
	Clock	275313
	Central sound system	275123
	<b>Electronic Safety and Security:</b>	
	Life safety devices per code	283111
	<b>Miscellaneous:</b>	
	<b>Pencil sharpener (optional)</b>	

**NOTES:**

1. Finishes/Features: Refer to Chapter 9 for specification references.

**01.1001 FOOD SCIENCE AND TECHNOLOGY**

**Freezer**

CHAPTER 6: CAREER-TECHNICAL SCHOOL

<p><b>Program Type:</b> 6</p> <p><b>Size Requirements:</b> 400 SF</p> <p><b>Requirements:</b></p> <p><u>FINISHES:</u>                  Flooring:                  Quarry tile</p> <p>Ceiling:                  Quarry tile base</p> <p>Walls:                  Manufactured insulated panel</p> <p><u>LOOSE FURNISHINGS:</u>                  N/A</p> <p><u>ENVIRONMENTAL CONSIDERATIONS:</u></p> <ul style="list-style-type: none"> <li>▪ Ventilation for refrigeration machinery</li> <li>▪ Cleanable building surfaces</li> <li>▪ Floor to be flush with adjacent kitchen floor</li> </ul>	<p style="text-align: right;">Spec. Ref.#</p> <p><u>FEATURES<sup>1</sup>:</u>  <u>Fixed Items:</u>                  Overhead hoist system 412223</p> <p><u>Fire Suppression:</u>                  Fire suppression system 211000</p> <p><u>Plumbing:</u>                  N/A</p> <p><u>HVAC:</u>                  Exhaust air system for compressors Div. 23</p> <p><u>Electrical:</u>                  Incandescent lighting 265100                  Illumination level: See Table 8600-5                  Single level switching 262726                  Electrical connections to freezer                  Refrigeration equipment 262726</p> <p><u>Communications:</u>                  N/A</p> <p><u>Electronic Safety and Security:</u>                  N/A</p> <p><u>Miscellaneous:</u>                  N/A</p>
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NOTES:

1. Finishes/Features: Refer to Chapter 9 for specification references.

**01.1001 FOOD SCIENCE AND TECHNOLOGY**

CHAPTER 6: CAREER-TECHNICAL SCHOOL

**Cooler**

<p><b>Program Type:</b> 6</p> <p><b>Size Requirements:</b> 400 SF</p> <p><b>Requirements:</b></p> <p><u>FINISHES:</u>                  Flooring: Quarry tile                  Ceiling: Quarry tile base                  Walls: Manufactured insulated panel</p> <p><u>LOOSE FURNISHINGS:</u> N/A</p> <p><u>ENVIRONMENTAL CONSIDERATIONS:</u></p> <ul style="list-style-type: none"> <li>▪ Ventilation for refrigeration machinery</li> <li>▪ Cleanable building surfaces</li> <li>▪ Floor to be flush with adjacent kitchen floor</li> </ul>	<p style="text-align: right;">Spec. Ref.#</p> <p><u>FEATURES</u><sup>1</sup>:</p> <p><u>Fixed Items:</u> Overhead hoist system 412223</p> <p><u>Fire Suppression:</u> Fire suppression system 211000</p> <p><u>Plumbing:</u> N/A</p> <p><u>HVAC:</u> Exhaust air system for compressors Div. 23</p> <p><u>Electrical:</u> Incandescent lighting 265100                  Illumination level: See Table 8600-5                  Single level switching 262726                  Electrical connections to cooler refrigeration equipment 262726</p> <p><u>Communications:</u> N/A</p> <p><u>Electronic Safety and Security:</u> N/A</p> <p><u>Miscellaneous:</u> N/A</p>
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NOTES:

1. Finishes/Features: Refer to Chapter 9 for specification references.



**01.0601 HORTICULTURE  
CT-P6-1**

CHAPTER 6: CAREER-TECHNICAL SCHOOL

<b><u>PROGRAM DESCRIPTION:</u></b> Applies principles of plant anatomy, nutrition, reproduction, genetics, health and artistic design to production, management, processing, and marketing of ornamental plants, landscapes, and floral designs. Communications, business principles and leadership skill development are essential to the program.		<b>Spec.</b>
<b>Program Type:</b> 6		<b>Ref.#</b>
<b>Size Requirements:</b> 2,000 SF Lab		
Lab Requirements:		
<b><u>FINISHES:</u></b>	<b>Spec.</b>	
Flooring:	<b>Ref #</b>	
<b>Sealed</b> concrete	033000	
Ceiling:		
Painted, exposed structure	099100	
Walls:		
Painted concrete masonry units	042000/ 099100	
<b><u>LOOSE FURNISHINGS:</u></b>		
(12) Workbenches with heavy-duty metal tops		
(24) Stools or chairs		
Wastebasket		
<b><u>SITE FEATURES:</u></b>		
Greenhouse – 3,000 SF	133413	
½ earth flooring, ½ concrete flooring (w/drains)		
Minimum of one 8'x10' overhead door		
Provide electrical, plumbing, and heating/ventilation systems as per greenhouse manufacturer's recommendations		
Minimum of 4 hose bibs		
Fire suppression system if required		
		<b>24' of chalk/marker board, tack board, or tackable wall surface</b> 101100
		24' of tall storage cabinets 123550
		Pencil sharpener support ( <i>optional</i> ) 062000
		(3) Paper towel dispensers 102813
		12'x14' motorized overhead sectional door to exterior 083613
		3'x7' hollow metal service door to exterior 081113
		Steel bollards at overhead door, both sides 055000
		<b><u>Fire Suppression:</u></b>
		Fire suppression system 211000
		<b><u>Plumbing:</u></b>
		1 washfountain (minimum) 224000
		2 utility sinks (minimum) 224000
		2 hose bibbs (minimum) 224000
		Safety shower/eyewash 224000
		2 floor drains 224000
		1 trench drain 224000
		Plumbing connections 221116/221119/224000
		<b><u>HVAC:</u></b>
		Supply/return air system Div. 23
		Independent temperature control 230923
		<b><u>Electrical:</u></b>
		High intensity lighting or fluorescent lighting 265100
		Illumination level: See Table 8600-5
		Multilevel switching 262726
		30 duplex receptacles (minimum) 262726
		Double duplex receptacle adjacent to each data and video port 262726
		<b><u>Communications:</u></b>
		1 video port and video display device 271533/271543/274119
		1 voice port and phone 271513/ <b>273123</b>
		4 data ports 271523
		Clock 275313
		Central sound system 275123
		<b><u>Electronic Safety and Security:</u></b>
		Life safety devices per code 283111
		<b><u>Miscellaneous:</u></b>
		<b>Pencil sharpener (optional)</b>

**NOTES:**

1. Finishes/Features: Refer to Chapter 9 for specification references.

**01.0601 HORTICULTURE****Retail**

## CHAPTER 6: CAREER-TECHNICAL SCHOOL

		Spec. Ref.#
<b>Program Type:</b>	6	
<b>Size Requirements:</b>	400 SF	
<b>Requirements:</b>		
<u>FINISHES:</u>	<u>Spec. Ref #</u>	
Flooring:		
ET, sheet vinyl, or linoleum	096500 096516	
Base:		
Resilient	096500	
Ceiling:		
Suspended, acoustical	095113	
Walls:		
Painted concrete masonry units	042000/ 099100	
<u>LOOSE FURNISHINGS:</u>		
Wastebasket		
<u>ENVIRONMENTAL CONSIDERATIONS:</u>		
▪ Wall minimum STC 40		
▪ Ceiling minimum CAC 35		
▪ This room to be one-story (14'+/-) tall, located within high-bay program.		
		<u>FEATURES<sup>1</sup>:</u>
		<u>Fixed Items:</u>
		10' of base cabinets 123550
		4' of cashier's station 123550
		Paper towel dispenser 102813
		<u>Fire Suppression:</u>
		Fire suppression system 211000
		<u>Plumbing:</u>
		1 utility sink 224000
		Plumbing connections 221116/221119/224000
		<u>HVAC:</u>
		Supply/return air system Div. 23
		Independent temperature control 230923
		<u>Electrical:</u>
		Fluorescent lighting 265100
		Illumination level: See Table 8600-5
		Single level switching 262726
		4 duplex receptacles 262726
		Double duplex receptacle adjacent to each data port 262726
		<u>Communications:</u>
		1 data port 271513
		Clock 275313
		Central sound system 275123
		<u>Electronic Safety and Security:</u>
		Life safety devices per code 283111
		<u>Miscellaneous:</u>
		N/A

NOTES:

1. Finishes/Features: Refer to Chapter 9 for specification references.

**17.1200 MEDIUM/HEAVY TRUCK TECHNICIAN  
CT-P6-1**

CHAPTER 6: CAREER-TECHNICAL SCHOOL

<b>PROGRAM DESCRIPTION:</b>		<b>FEATURES<sup>1</sup>:</b>		Spec.
This program focuses on the service and repair of trucks. Instruction includes the diagnosis, maintenance, and repair of diesel engines operational systems. ASE areas of concentration are: Diesel Engines, Suspension and Steering, Brakes, Electrical/Electronic Systems and Preventative Maintenance Inspection.		<b>Fixed Items:</b>		<b>Ref.#</b>
<b>Program Type:</b>	6	<b>24' of chalk/marker board, tack board, or tackable wall surface</b>	101100	
<b>Size Requirements:</b>	6,000 SF Lab	24' of tall storage cabinets	123550	
<b>Lab Requirements:</b>		Pencil sharpener support ( <i>optional</i> )	062000	
<b>FINISHES:</b>		(4) Paper towel dispensers	102813	
Flooring:		12'x14' motorized overhead sectional door to exterior	083613	
<b>Sealed</b> concrete	033000	3'x7' hollow metal service door to exterior	081113	
Ceiling:		Steel bollards at overhead door, both sides	055000	
Painted, exposed structure	099100	<b>Fire Suppression:</b>		
Walls:		Fire suppression system	211000	
Painted concrete masonry units	042000/ 099100	<b>Plumbing:</b>		
		2 washfountains (minimum)	224000	
<b>LOOSE FURNISHINGS:</b>		2 utility sinks (minimum)	224000	
(8) Workbenches with heavy-duty metal tops		2 hose bibbs (minimum)	224000	
(24) Stools or chairs		Safety shower/eyewash	224000	
Wastebasket		8 compressed air connections	221500	
		4 floor drains	224000	
<b>Miscellaneous:</b>		1 trench drain	224000	
<b>Pencil sharpener (optional)</b>		Plumbing connections	221116/221119/224000	
		<b>HVAC:</b>		
<u>The following items are to be funded by the School District:</u>		Supply/return air system	Div. 23	
Truck lifts		Independent temperature control	230923	
Frame rack		Vehicle exhaust system	Div. 23	
		<b>Electrical:</b>		
		High intensity lighting or fluorescent lighting	265100	
		Illumination level: See Table 8600-5		
		Multilevel switching	262726	
		30 duplex receptacles (minimum)	262726	
		Double duplex receptacle adjacent to each data and video port	262726	
		(6) 220 volt receptacles	262726	
		<b>Communications:</b>		
		1 video port and video display device	271533/271543/274119	
		1 voice port and phone	271513/ <b>273123</b>	
		4 data ports	271513	
		Clock	275313	
		Central sound system	275123	
		<b>Electronic Safety and Security:</b>		
		Life safety devices per code	283111	

**NOTES:**

1. Finishes/Features: Refer to Chapter 9 for specification references.



**17.1200 MEDIUM/HEAVY TRUCK TECHNICIAN  
Flammable Material Storage**

CHAPTER 6: CAREER-TECHNICAL SCHOOL

<b>Program Type:</b> 6	Spec. Ref #	<u>FEATURES<sup>1</sup>:</u>	Spec. Ref.#
<b>Size Requirements:</b> 60 SF		<u>Fixed Items:</u> 3' of heavy duty adjustable steel shelving	105613
<b>Requirements:</b>		<u>Fire Suppression:</u> Fire suppression system	211000
<u>FINISHES:</u>		<u>Plumbing:</u> N/A	
Flooring: <b>Sealed</b> concrete	033000	<u>HVAC:</u> Supplemental heat as required Independent ventilation	Div. 23 Div. 23
Ceiling: Fire-rated gypsum drywall	092113	<u>Electrical:</u> Fluorescent lighting Illumination level: See Table 8600-5 Single level switching 2 duplex receptacles	265100 262726 262726
Walls: Painted concrete masonry units	042000/ 099100	<u>Communications:</u> Central sound system	275123
<u>LOOSE FURNISHINGS:</u> N/A		<u>Electronic Safety and Security:</u> Life safety devices per code	283111
<u>ENVIRONMENTAL CONSIDERATIONS:</u>		<u>Miscellaneous:</u> N/A	
<ul style="list-style-type: none"> <li>▪ Wall minimum STC 45</li> <li>▪ This room to be one-story (14'+/-) tall, located within high-bay program.</li> </ul>			

NOTES:

1. Finishes/Features: Refer to Chapter 9 for specification references.



**17.2302 PRECISION MACHINING  
CT-P6-1**

CHAPTER 6: CAREER-TECHNICAL SCHOOL

<b><u>PROGRAM DESCRIPTION:</u></b>		<b>Spec.</b>
Utilizing business and industry, math, science and technology standards, introduces concepts related to set-up and operation; and the control of various metal working equipment.		<b>Ref.#</b>
<b>Program Type:</b>	6	
<b>Size Requirements:</b>	3,500 SF Lab	
<b>Lab Requirements:</b>		
<b><u>FINISHES:</u></b>	<b>Spec.</b>	
	<b>Ref #</b>	
Flooring:		
<b>Sealed</b> concrete	033000	
Ceiling:		
Painted, exposed structure	099100	
Walls:		
Painted concrete masonry units	042000/ 099100	
<b><u>LOOSE FURNISHINGS:</u></b>		
(6) Workbenches with heavy-duty metal tops		
(24) Stools or chairs		
Wastebasket		
<b><u>Miscellaneous:</u></b>		
<b>Pencil sharpener (optional)</b>		
<b><u>FEATURES<sup>1</sup>:</u></b>		
<b><u>Fixed Items:</u></b>		
<b>24' of chalk/marker board, tack board, or tackable wall surface</b>		101100
24' of tall storage cabinets		123550
Pencil sharpener support ( <i>optional</i> )		062000
(4) Paper towel dispensers		102813
12'x14' motorized overhead sectional door to exterior		083613
3'x7' hollow metal service door to exterior		081113
Steel bollards at overhead door, both sides		055000
<b><u>Fire Suppression:</u></b>		
Fire suppression system		211000
<b><u>Plumbing:</u></b>		
2 washfountains (minimum)		224000
2 utility sinks (minimum)		224000
2 hose bibbs (minimum)		224000
Safety shower/eyewash		224000
20 compressed air connections		221500
Flat floor – no floor drains		
1 trench drain		224000
Plumbing connections		221116/221119/224000
<b><u>HVAC:</u></b>		
Supply/return air system		Div. 23
Independent temperature control		230923
<b><u>Electrical:</u></b>		
High intensity lighting or fluorescent lighting		265100
Illumination level: See Table 8600-5		
Multilevel switching		262726
30 duplex receptacles (minimum)		262726
Double duplex receptacle adjacent to each data and video port		262726
220v 3-phase service		262726
480v 3-phase service		262726
Room safety push-button		262726
<b><u>Communications:</u></b>		
1 video port and video display device		271533/271543/274119
1 voice port and phone		271513/ <b>273123</b>
4 data ports		271513
Clock		275313
Central sound system		275123
<b><u>Electronic Safety and Security:</u></b>		
Life safety devices per code		283111

**NOTES:**

1. Finishes/Features: Refer to Chapter 9 for specification references.
2. This lab may be air-conditioned.

**17.2302 PRECISION MACHINING  
CNC Room**

## CHAPTER 6: CAREER-TECHNICAL SCHOOL

		Spec. Ref.#
<b>Program Type:</b>	6	
<b>Size Requirements:</b>	900 SF	
<b>Requirements:</b>		
<u>FINISHES:</u>	Spec. Ref #	
Flooring:		
<b>Sealed</b> concrete	033000	
Ceiling:		
Suspended, acoustical	095113	
Option: painted, exposed structure	099100	
Walls:		
Painted concrete masonry units	042000/ 099100	
<u>LOOSE FURNISHINGS:</u>		
(4) Chairs		
<u>ENVIRONMENTAL CONSIDERATIONS:</u>		
▪ Wall <b>only</b> minimum STC <b>45</b>		
▪ This room to be one-story (14'+/-) tall, located within high-bay program.		
		<u>FEATURES<sup>1</sup>:</u>
		<u>Fixed Items:</u>
		20' of plastic laminate counter
		20' of adjustable shelving
		123550 062000
		<u>Fire Suppression:</u>
		Fire suppression system
		211000
		<u>Plumbing:</u>
		N/A
		<u>HVAC:</u>
		Supplemental heat as required
		Independent ventilation (see note 2)
		Div. 23 Div. 23
		<u>Electrical:</u>
		Fluorescent lighting
		Illumination level: See Table 8600-5
		Single level switching
		4 duplex receptacles
		Double duplex receptacle adjacent to
		each data port
		220v service
		265100 262726 262726 262726 262726 262726
		<u>Communications:</u>
		Central sound system
		6 data ports
		275123 271513
		<u>Electronic Safety and Security:</u>
		Life safety devices per code
		283111
		<u>Miscellaneous:</u>
		N/A

NOTES:

1. Finishes/Features: Refer to Chapter 9 for specification references.
2. Room may be cooled from central HVAC system, but all air must be exhausted and not returned.



**17.3601 WOOD PRODUCT TECHNOLOGIES  
CT-P6-1**

CHAPTER 6: CAREER-TECHNICAL SCHOOL

<b><u>PROGRAM DESCRIPTION:</u></b>	Utilizing business and industry, math, science, and technology standards, introduces concepts of wood product materials and technologies; design and production of window frames, molding, trims and panels; and wood crafting skills including the design and manufacture of wood products such as furniture, moldings, trim, fixtures, and cabinetry.	<b><u>FEATURES<sup>1</sup>:</u></b>	Spec.
<b>Program Type:</b>	6	<b><u>Fixed Items:</u></b>	<b><u>Ref.#</u></b>
<b>Size Requirements:</b>	3,000 SF Lab	<p><b><i>24' of chalk/marker board, tack board, or tackable wall surface</i></b> 101100</p> <p>24' of tall storage cabinets 123550</p> <p>Pencil sharpener support (<i>optional</i>) 062000</p> <p>(3) Paper towel dispensers 102813</p> <p>12'x14' motorized overhead sectional door to exterior 083613</p> <p>3'x7' hollow metal service door to exterior 081113</p> <p>Steel bollards at overhead door, both sides 055000</p>	
<b>Lab Requirements:</b>		<b><u>Fire Suppression:</u></b>	
<b><u>FINISHES:</u></b>	Spec.	Fire suppression system 211000	
Flooring:	<b><u>Ref #</u></b>	<b><u>Plumbing:</u></b>	
<b>Sealed</b> concrete	033000	<p>1 washfountain (minimum) 224000</p> <p>2 utility sinks (minimum) 224000</p> <p>2 hose bibbs (minimum) 224000</p> <p>Safety shower/eyewash 224000</p> <p>2 floor drains 224000</p> <p>1 trench drain 224000</p> <p>Plumbing connections 221116/221119/224000</p>	
Ceiling:		<b><u>HVAC:</u></b>	
Painted, exposed structure	099100	<p>Supply/return air system Div. 23</p> <p>Independent temperature control 230923</p> <p>Dust collection system 233513</p>	
Walls:		<b><u>Electrical:</u></b>	
Painted concrete masonry units	042000/ 099100	<p>High intensity lighting or fluorescent lighting 265100</p> <p>Illumination level: See Table 8600-5</p> <p>Multilevel switching 262726</p> <p>30 duplex receptacles (minimum) 262726</p> <p>Double duplex receptacle adjacent to each data and video port 262726</p>	
<b><u>LOOSE FURNISHINGS:</u></b>		<b><u>Communications:</u></b>	
(12) Workbenches with heavy-duty wooden tops		<p>1 video port and video display device 271533/271543/274119</p>	
(24) Stools or chairs		<p>1 voice port and phone 271513/<b>273123</b></p>	
Wastebasket		<p>4 data ports 271513</p>	
		<p>Clock 275313</p>	
		<p>Central sound system 275123</p>	
		<p>Room safety push-button 262726</p>	
		<b><u>Electronic Safety and Security:</u></b>	
		<p>Life safety devices per code 283111</p>	
		<b><u>Miscellaneous:</u></b>	
		<b><i>Pencil sharpener (optional)</i></b>	

**NOTES:**

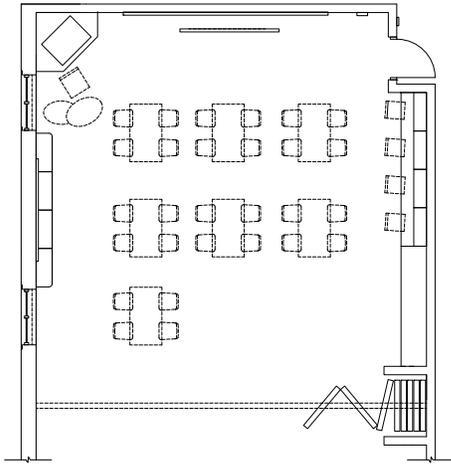
1. Finishes/Features: Refer to Chapter 9 for specification references.



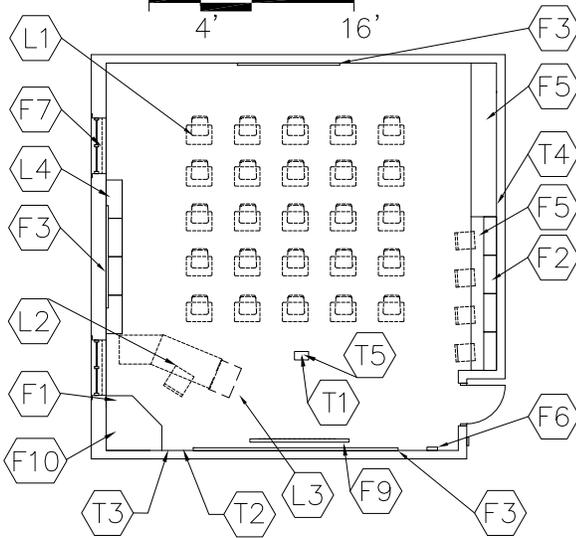
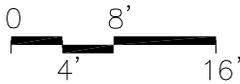


**RELATED CLASSROOM  
CT-P6-2**

**CHAPTER 6: CAREER-TECHNICAL HIGH SCHOOL**



CLASSROOM WITH OPTIONAL FOLDING WALL



TYPICAL CLASSROOM

**CAPACITY:** 25 students  
**SIZE:** 900 SF

**PROGRAM ACTIVITIES:**

- Large group, small group, and individual instruction
- Group and individual work
- Demonstrations
- Accommodates any of the core academic disciplines

**SPATIAL RELATIONSHIPS:**

- Near other related lab
- Near teacher prep area/workroom
- Classrooms should be located in academic "zone" that is away from noisy or public activities
- Classrooms with access to media center and administrative services
- Flexibility of space
- Proximity to main corridor to accommodate other students without interrupting lab

**ENVIRONMENTAL CONSIDERATIONS:**

- **Required: View glass – minimum 5% without daylighting design; minimum 3% with daylighting design.**  
**Recommended: Daylighting design with glazing area determined by design solution.**
- Environmental sound control -  
wall **only** minimum STC 45  
ceiling minimum CAC 35, NRC 0.70

**NOTES:**

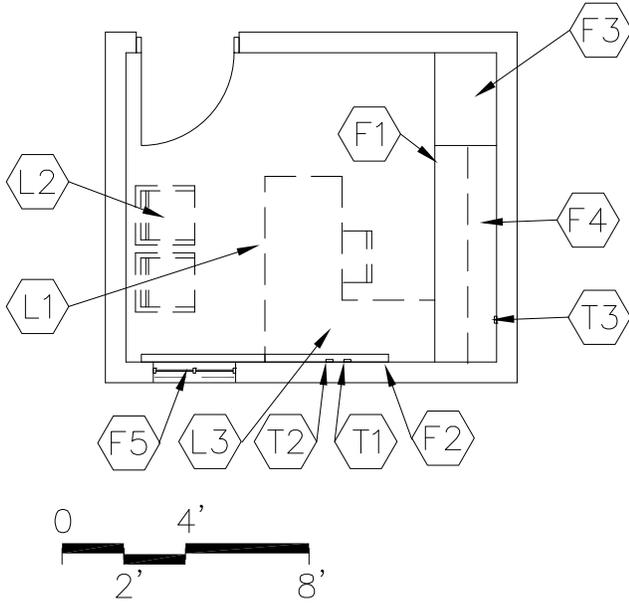
1. Loose furnishings shown represent one of many possible arrangements.
2. Depending upon the educational program of the district, a tall wardrobe may be placed in this classroom or could be placed in a teacher prep area/workroom.

**RELATED CLASSROOM  
CT-P6-2**
**CHAPTER 6: CAREER-TECHNICAL HIGH SCHOOL**

<u>FINISHES<sup>1</sup>:</u>	Spec. Ref.#	<u>FEATURES<sup>1</sup>:</u>	Spec. Ref.#
<u>Flooring:</u>			
Carpet <b>or carpet tile</b>	096816	F1 Tall wardrobe with file drawers	123550
Optional: linoleum, ET, or sheet vinyl	096516 096500 <b>096813</b>	F2 Computer work surface (could be loose)	123550
Base:		F3 <b>20'-32' combination chalk/marker board, tack board and tackable wall surface</b>	101100
Resilient base	096500	F4 <b>Reserved</b>	
Ceiling:		F5 <b>18'-24' combination base and wall cabinets</b>	123550
Suspended, acoustical	095113	F6 Pencil sharpener support ( <b>optional</b> )	062000
Walls:		F7 Windows with integral blinds	085113
Painted concrete masonry units	042000/099100	F8 <b>Reserved</b>	
		F9 Projection screen (optional)	115213
		F10 Technology support casework	123550
<u>LOOSE FURNISHINGS:</u>			
L1 Student desks and chairs		<u>Fire Suppression:</u>	
L2 Teacher desk or workstation/computer support and chair		Fire suppression system	211000
L3 File cabinet		<u>Plumbing:</u>	
L4 9' of low bookcases (fixed or mobile) Wastebasket		N/A	
		<u>HVAC:</u>	
		Supply/return air system	Div. 23
		Independent temperature control	230923
		<u>Electrical:</u>	
		Fluorescent lighting:	265100
		Illumination level: See Table 8600-5	
		Multilevel switching	262726
		4 duplex receptacles	262726
		Double duplex receptacle adjacent to each data and video port	262726
		<u>Communications:</u>	
		T1 1 video port	271533/271543
		T2 1 voice port and phone	271513/ <b>273123</b>
		T3 1 data port near teacher workstation	271513
		T4 4 data ports (minimum) for <b>classroom technology</b>	271513
		Clock	275313
		Central sound system	275123
		Sound reinforcement system	275127
		T5 Overhead projector	274119
		<u>Electronic Safety and Security:</u>	
		Life safety devices per code	283111
<u>Miscellaneous:</u>			
		<b>Pencil sharpener (optional)</b>	
M1 Operable partitions between classrooms are optional	102226		

**NOTES:**

1. Finishes/Features: Refer to Chapter 9 for specification references.
2. Technology components may be placed in a separate small cabinet, or integrated in the other casework in the room.
3. Where appropriate, some casework may be mobile to add flexibility and become part of the loose furnishings.



**PROGRAM ACTIVITIES:**

- Private space for program instructor
- One-on-one conferences with academic instructors, students, etc.

**SPATIAL RELATIONSHIPS:**

- Near related lab
- Direct access to school circulation areas

**ENVIRONMENTAL CONSIDERATIONS:**

- Environmental sound control -  
wall minimum STC 45  
ceiling minimum CAC 35, NRC 0.70

CAPACITY: 1 - 3 persons  
SIZE: 120 SF

**NOTES:**

1. Loose furnishings shown represent one of many possible arrangements.

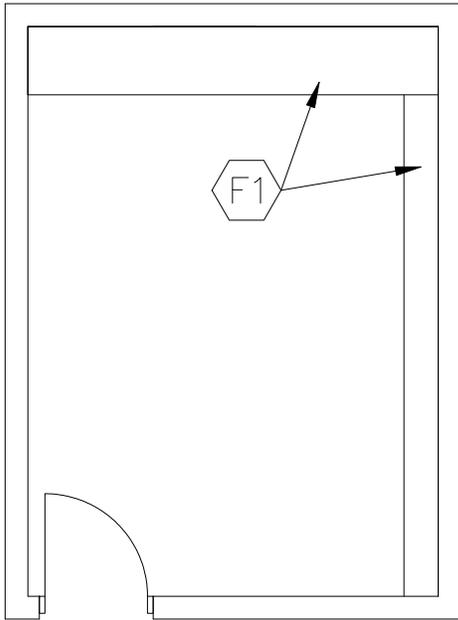
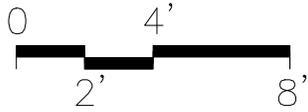
**OFFICE  
CT-P6-3**

## CHAPTER 6: CAREER-TECHNICAL SCHOOL

<u>FINISHES<sup>1</sup>:</u>	Spec. Ref.#	<u>FEATURES<sup>1</sup>:</u>	Spec. Ref.#
Flooring:		<u>Fixed Items:</u>	
Carpet or carpet tile	096816	F1 Work surface with file drawers	123550
	096813	F2 4' of tack board	101100
		or tackable wall surface	
Base:		F3 Tall wardrobe	123550
Resilient base	096500	F4 Wall cabinets above work surface	123550
Ceiling:		<u>Fire Suppression:</u>	
Suspended, acoustical	095113	Fire suppression system	211000
Walls:		<u>Plumbing:</u>	
Painted gypsum wallboard		N/A	
over metal studs	092116/099100		
<u>LOOSE FURNISHINGS:</u>		<u>HVAC:</u>	
L1 Desk and chair		Supply/return air system	Div. 23
L2 Visitor chairs		Independent temperature control	230923
L3 Computer desk return			
Wastebasket		<u>Electrical:</u>	
		Single level switching	262726
		Fluorescent lighting	265100
		Illumination level: See Table 8600-5	
		4 duplex receptacles	262726
		Double duplex receptacle adjacent	
		to data and video port	262726
		<u>Communications:</u>	
		T1 1 voice port and phone	271513/ <b>273123</b>
		T2 1 data port near workstation	271513
		T3 1 video port	271533/271543
		Central sound system	275123
		Clock	275313
		<u>Electronic Safety and Security:</u>	
		Life safety devices per code	283111
		<u>Miscellaneous:</u>	
		N/A	

NOTES:

1. Finishes/Features: Refer to Chapter 9 for specification references. Optional: moveable cabinets
2. Fixed casework and loose furnishings can also be all fixed casework or all loose furnishings.



**PROGRAM ACTIVITIES:**

- Space for storage of lab equipment

**SPATIAL RELATIONSHIPS:**

- Near related lab

**ENVIRONMENTAL CONSIDERATIONS:**

N/A

CAPACITY:  
SIZE:

N/A  
200 SF

NOTES:

**STORAGE AREA  
CT-P6-4**
**CHAPTER 6: CAREER-TECHNICAL SCHOOL**

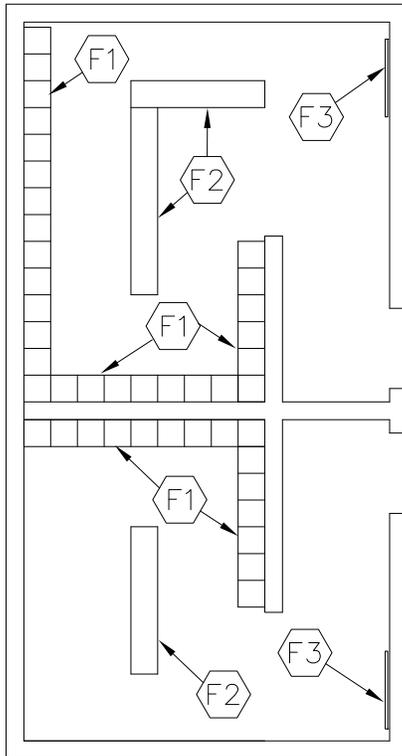
	Spec. Ref.#		Spec. Ref.#
<u>FINISHES<sup>1</sup>:</u>		<u>FEATURES<sup>1</sup>:</u>	
Flooring:		<u>Fixed Items<sup>1</sup>:</u>	
<b>Sealed</b> concrete	033000	F1 8'-20' of open shelving	
		Depth may vary (fixed or loose)	123550
Base:		<u>Fire Suppression:</u>	
Resilient base	096500	Fire suppression system	211000
Ceiling:		<u>Plumbing:</u>	
Exposed structure	---	N/A	
Walls:		<u>HVAC:</u>	
Painted concrete masonry units	042000/099100	To be determined by Design Professional	
		Supplemental heat as required	Div. 23
<u>LOOSE FURNISHINGS:</u>		<u>Electrical:</u>	
N/A		Single level switching	262726
		Fluorescent lighting	265100
		Illumination level: See Table 8600-5	
		Duplex receptacles	262726
		<u>Communications:</u>	
		N/A	
		<u>Electronic Safety and Security:</u>	
		Life safety devices per code	283111
		<u>Miscellaneous:</u>	
		N/A	

**NOTES:**

1. Finishes/Features: Refer to Chapter 9 for specification references.

## CHANGING ROOM CT-P6-5

### CHAPTER 6: CAREER-TECHNICAL SCHOOL



50 total lockers

CAPACITY: N/A  
 SIZE: 9 SF per student (see Note 2)

#### PROGRAM ACTIVITIES:

- Personal and health needs for the program Specific users.
- Changing of clothes and/or uniforms.
- Storage of personal items while students are in lab.

#### SPATIAL RELATIONSHIPS:

- Adjacent to related lab

#### ENVIRONMENTAL CONSIDERATIONS:

- Sanitary and durable finishes.
- Environmental sound control  
 Wall minimum STC 40  
 Ceiling minimum CAC 35, NRC 0.70

#### NOTES:

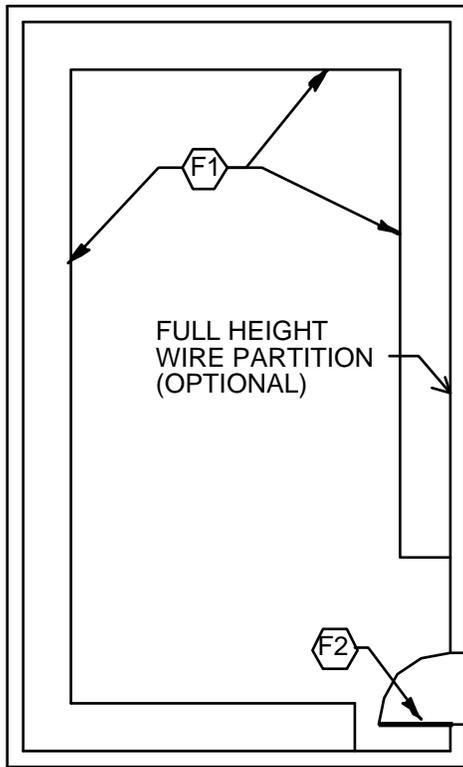
1. Large and small changing areas are interchangeable for either males or females. Determination based on male/female ratio within each program.
2. Student count determined by total number of approved program spaces Types 5, 6, and 7 times 30.

**CHANGING ROOM  
CT-P6-5**
**CHAPTER 6: CAREER-TECHNICAL SCHOOL**

<u>FINISHES<sup>1</sup>:</u>	Spec. Ref.#	<u>FEATURES<sup>1</sup>:</u>	Spec. Ref.#
<u>Flooring:</u>		<u>Fixed Items<sup>1</sup>:</u>	
Polished concrete finishing, or colored concrete finishing	033510 033519	F1 Student lockers	105113
Optional: linoleum or rubber	096500 096516	F2 Locker benches	062000
		F3 24" x 60" mirror	102813
<u>Base:</u>		<u>Fire Suppression:</u>	
Resilient base	096500	Fire suppression system	211000
<u>Ceiling:</u>		<u>Plumbing:</u>	
Suspended, acoustical with high impact hold down clips	095113	N/A	
<u>Walls:</u>		<u>HVAC:</u>	
Painted concrete masonry units	042000 / 099100	Supply/Return air system	Div. 23
		Exhaust air system	Div. 23
		Supplemental heat as required	Div. 23
		Individual temperature control	230923
<u>LOOSE FURNISHINGS</u>		<u>Electrical:</u>	
Wastebaskets		Single level switching	262726
		Fluorescent lighting	265100
		Illumination level: See Table 8600-6	
		2 Duplex receptacles	262726
		Means of egress lighting per code	265100
		<u>Communications:</u>	
		Clock	275313
		Central Sound System	275123
		<u>Electronic Safety and Security:</u>	
		Life safety devices per code	283111
		<u>Miscellaneous:</u>	
		N/A	

**NOTES:**

1. Finishes/Features: Refer to Chapter 9 for specification references.



**PROGRAM ACTIVITIES:**

- Storage of program related tools and instruments.
- Storage of students' tools.

**SPATIAL RELATIONSHIPS:**

- Adjacent to related lab

**ENVIRONMENTAL CONSIDERATIONS:**

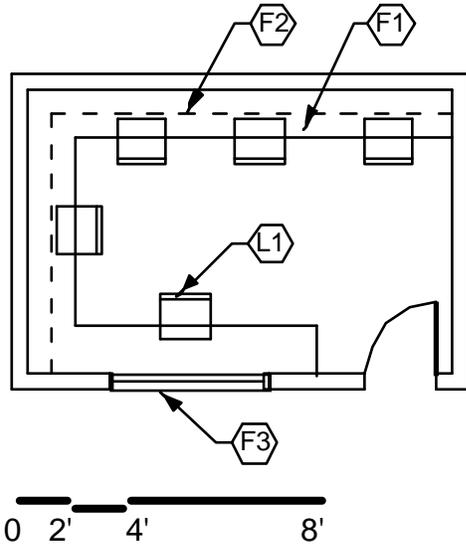
- Sanitary and durable finishes

CAPACITY:  
SIZE:  
ANCILLARY SPACES:

N/A  
550 SF

NOTES:





PROGRAM ACTIVITIES:

- Individual computer research.
- Reference program specific manuals.
- Small group meetings.

SPATIAL RELATIONSHIPS:

- Adjacent to related lab

ENVIRONMENTAL CONSIDERATIONS:

- Sanitary and durable finishes
- Environmental sound control
  - Wall **only** minimum STC **45**
  - Ceiling minimum CAC 35, NRC 0.70

CAPACITY:  
SIZE:

N/A  
200 SF

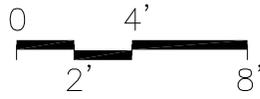
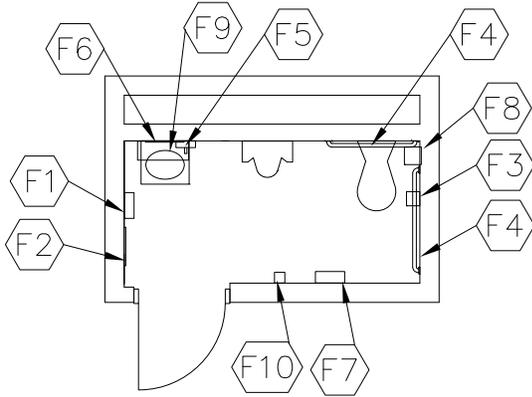
NOTES:

**REFERENCE ROOM  
CT-P6-7**
**CHAPTER 6: CAREER-TECHNICAL SCHOOL**

	Spec. Ref.#		Spec. Ref.#
<b><u>FINISHES<sup>1</sup>:</u></b>		<b><u>FEATURES<sup>1</sup>:</u></b>	
Flooring:		<b><u>Fixed Items:</u></b>	
<b>Sealed</b> concrete	033000	F1 34' of plastic lam. counter	062000
Optional: rubber	096500	F2 27' of adjustable shelving	062000
		F3 Interior window	081113/ 088000
Base:		<b><u>Fire Suppression:</u></b>	
Resilient base	096500	Fire suppression system	211000
Ceiling:		<b><u>Plumbing:</u></b>	
Suspended, acoustical	095113	N/A	
Walls:		<b><u>HVAC:</u></b>	
Painted concrete masonry units	042000 / 099100	Supply/return air system	Div. 23
		Exhaust air system	Div. 23
		Supplemental heat as required	Div. 23
<b><u>LOOSE FURNISHINGS</u></b>		<b><u>Electrical:</u></b>	
L3 Student chairs		Single level switching	262726
Wastebasket		Fluorescent lighting	265100
		Illumination level: See Table 8600-5	
		2 Duplex receptacles	262726
		Duplex receptacle adjacent to	
		Each data and video port	262726
		<b><u>Communications:</u></b>	
		T1 6 data ports	271513
		<b><u>Electronic Safety and Security:</u></b>	
		Life safety devices per code	283111
		<b><u>Miscellaneous:</u></b>	
		N/A	

**NOTES:**

1. Finishes/Features: Refer to Chapter 9 for specification references.



**PROGRAM ACTIVITIES:**

- Personal and health needs for the program
- Specific users
- Changing of clothes and/or uniforms.

**SPATIAL RELATIONSHIPS:**

- Adjacent to related lab

**ENVIRONMENTAL CONSIDERATIONS:**

- Sanitary and durable finishes.
- Environmental sound control  
 Wall minimum STC 48  
 Ceiling minimum CAC 35, NRC 0.70

CAPACITY:  
SIZE:

N/A  
68 SF

NOTES:

**TOILET ROOM**  
**CT-P6-8**
**CHAPTER 6: CAREER-TECHNICAL SCHOOL**

	Spec. Ref.#		Spec. Ref.#
<b><u>FINISHES<sup>1</sup>:</u></b>		<b><u>FEATURES<sup>1</sup>:</u></b>	
Flooring:		<b><u>Fixed Items:</u></b>	
<b>Sealed concrete</b>	<b>093000</b>	F1 Towel dispenser	102813
Optional: Rubber	096500	F2 24" x 60" mirror	102813
Base:		F3 Toilet tissue holder	102813
Resilient base	096500	F4 36" and 42" grab bars	102813
Ceiling:		F5 Soap dispenser	102813
Suspended, acoustical	095113	F6 16" x 24" mirror	102813
Walls:		F7 Sanitary product dispenser	102813
Painted concrete masonry units		F8 Sanitary product receptacle	102813
	042000 / 099100	F9 Stainless steel shelf (optional)	102813
		F10 Coat hook	102813
<b><u>LOOSE FURNISHINGS</u></b>		<b><u>Fire Suppression:</u></b>	
Wastebaskets		Fire suppression system	211000
		<b><u>Plumbing:</u></b>	
		Plumbing connections	221116/221119/224000
		<b><u>HVAC:</u></b>	
		Supply/return air system	Div. 23
		Exhaust air system	Div. 23
		Supplemental heat as required	Div. 23
		Individual temperature control	230923
		<b><u>Electrical:</u></b>	
		Single level switching	262726
		Fluorescent lighting	265100
		Illumination level: See Table 8600-5	
		2 Duplex receptacles	262726
		Means of egress lighting per code	265100
		<b><u>Communications:</u></b>	
		Clock	275313
		<b><u>Electronic Safety and Security:</u></b>	
		Life safety devices per code	283111
		<b><u>Miscellaneous:</u></b>	
		N/A	

**NOTES:**

1. Finishes/Features: Refer to Chapter 9 for specification references.

TABLE OF CONTENTS

A.	General Description .....	6317-3
B.	Program Example .....	6317-4
C.	Lab Plate Example .....	6317-5
D.	Lab Descriptions	
	▶ <b>Aircraft</b> Maintenance.....	6317-7
	Cleaning Room .....	6317-8
	Parts Storage.....	6317-9
	Hazardous Material Storage .....	6317-10
	▶ Animal Science and Management (Equine) .....	6317-11
	Stables.....	6317-12
E.	Related Classroom Plate .....	6317-13
F.	Office Plate .....	6317-15
G.	Storage Area Plate .....	6317-17
H.	Changing Room Plate .....	6317-19
I.	Tool Crib Plate.....	6317-21
J.	Reference Room Plate .....	6317-23
K.	Toilet Room Plate .....	6317-25

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**Program Type 7**

Description: Large to very large-sized lab space with enhanced support space.

Lab space to be "high-bay" (18' min. clearance) with exposed building structure.

Lab to utilize standard construction with the following exception – lab floor slab to be 8" thick.

Support space to be finished with sealed concrete or vinyl composition tile, paint, and suspended acoustical ceiling.

**Related classroom, office, changing room, reference room, and toilet room may be air-conditioned. The high bay lab is NOT air-conditioned. Program specific spaces are NOT air-conditioned.**

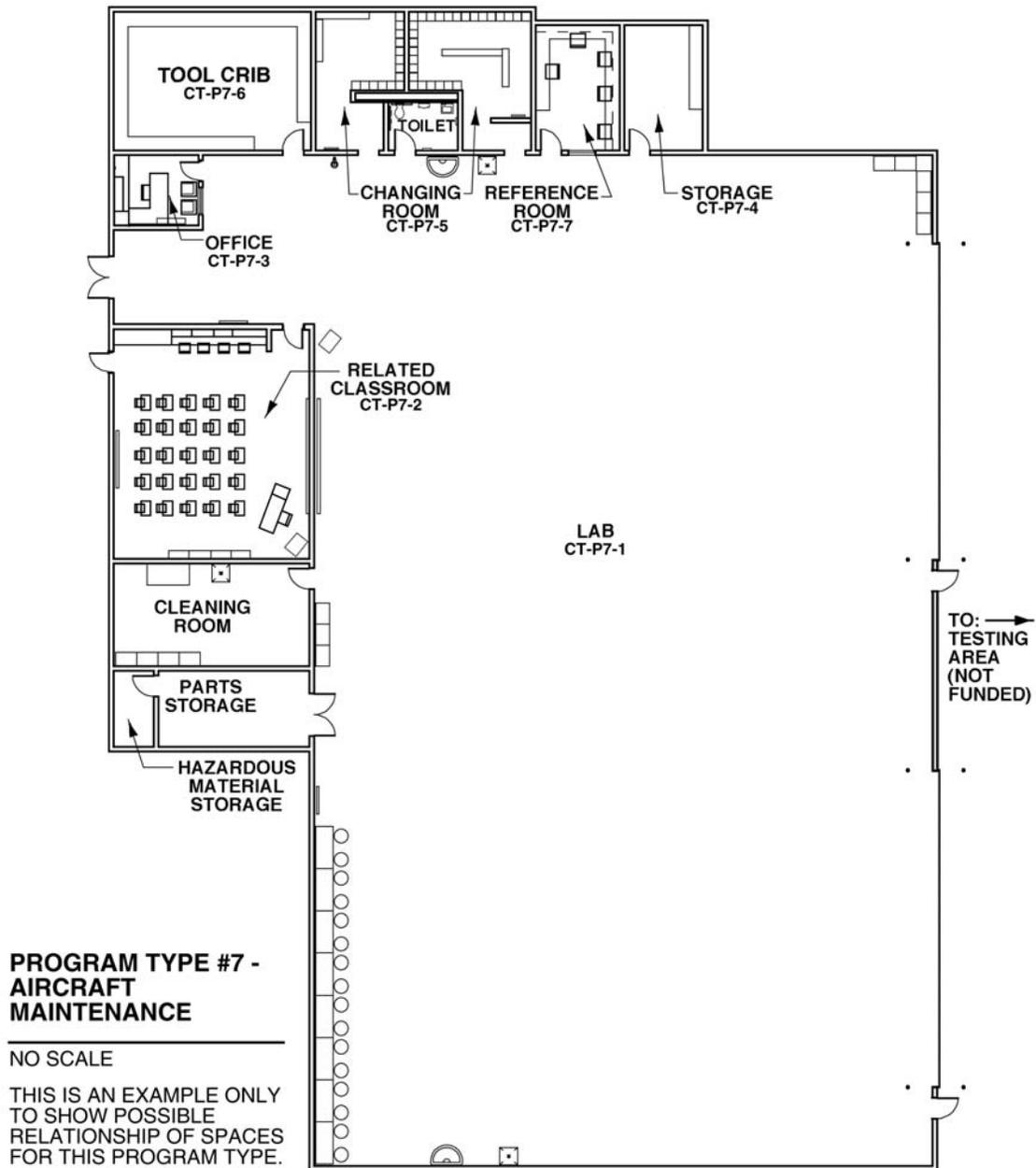
**NOTES:**

This is an example of how the Program Type 7 spaces in a career-technical school could be arranged. This is meant only to demonstrate the relationships between various spaces of this area.

Following are the Program Type 7 space plates:

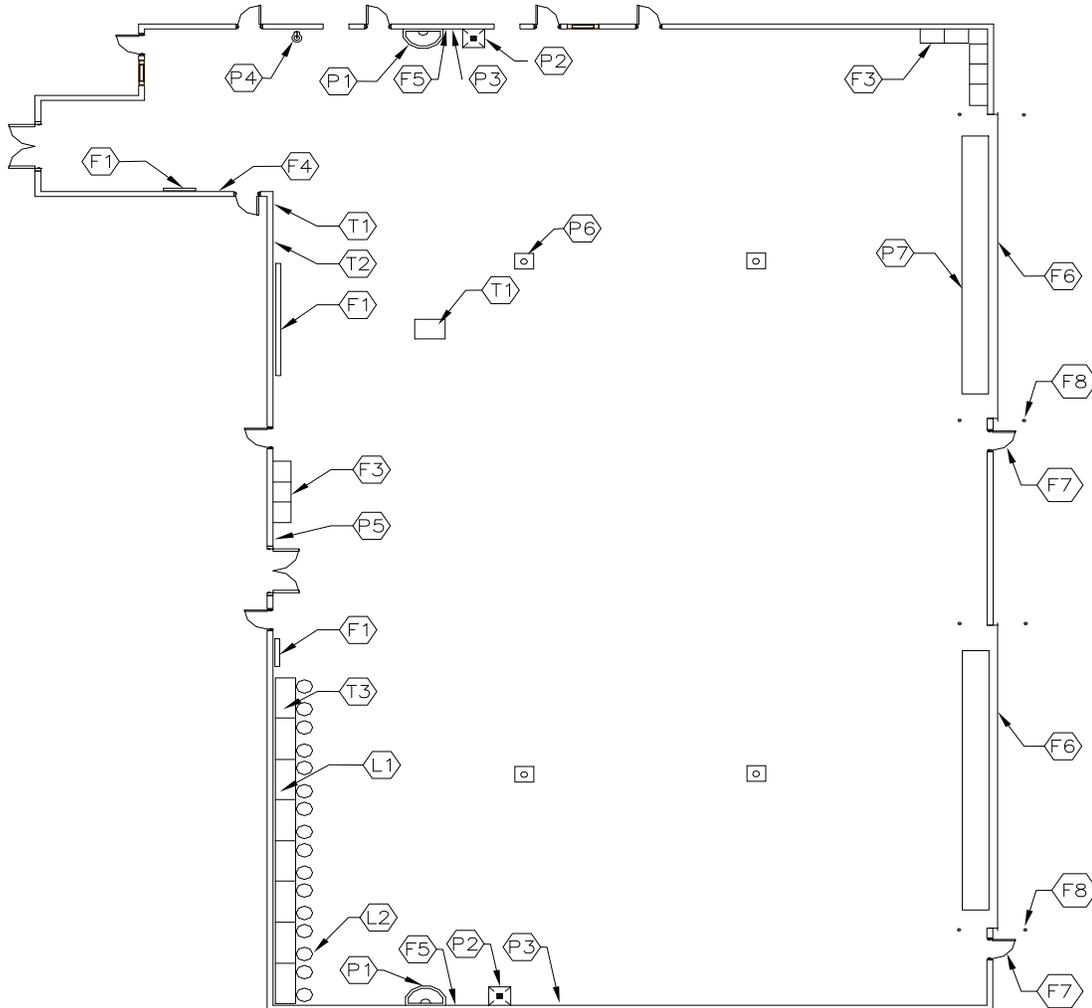
CT-P7-1	Lab
CT-P7-2	Related Classroom
CT-P7-3	Office
CT-P7-4	Storage
CT-P7-5	Changing Room
CT-P7-6	Tool Crib
CT-P7-7	Reference Room
CT-P7-8	Toilet Room

**PROGRAM TYPE 7  
EXAMPLE**



**NOTES:**

1. See lab descriptions within this section for specific lab requirements.
2. See individual space plates at the end of this section for specific requirements.



CAPACITY:	24 Students
SIZE:	8,000 – 13,000 SF
	(see lab summaries for exact sizes)
ANCILLARY SPACES:	CT-P7-2 thru CT-P7-8

**NOTES:**

1. Loose furnishings shown represent one of many possible arrangements.
2. Graphic plate is an example only. Other labs within this program are not drawn – refer to lab summaries within this program type for information on a particular lab.

**LAB**  
**CT-P7-1**

CHAPTER 6: CAREER-TECHNICAL SCHOOL

PROGRAM ACTIVITIES:

- Large and small group instruction
- Group and individual work
- Demonstrations

SPATIAL RELATIONSHIPS:

- Near other related labs
- Adjacent to typical support spaces
- Proximity to large group restrooms
- Located away from noisy or public activities
- Proximity to core academic area and common use areas
- Flexibility of space

ENVIRONMENTAL CONSIDERATIONS:

- **Required: View glass – minimum 5% without daylighting design; minimum 3% with daylighting design.**  
**Recommended: Daylighting design with glazing area determined by design solution.**
- Environmental sound control -  
wall **only** minimum STC **45**  
ceiling minimum CAC 35, NRC 0.70

NOTES:

1. Finishes/Features: Refer to Chapter 9 for specification references.
2. Loose Furnishings: Refer to Lab Profiles within this section.
3. Loose Furnishings, fixed equipment, utility locations, and general footprint of room shown represent one of many possible arrangements.

**17.0401 AIRCRAFT MAINTENANCE  
CT-P7-1**

CHAPTER 6: CAREER-TECHNICAL SCHOOL

<p><b><u>PROGRAM DESCRIPTION:</u></b> Classroom and lab learning experiences concerned with the inspection, repair, servicing, and overhauling of all airplane parts, including engines, propellers, instruments, airframes, fuel and oil tanks, control cables and hydraulic units. Involves learning the use of technical manuals and various types of testing equipment.</p> <p><b>Program Type:</b> 7</p> <p><b>Size Requirements:</b> 13,000 SF Lab</p> <p><b>Lab Requirements:</b></p> <table border="0"> <tr> <td></td> <td style="text-align: right;">Spec.</td> </tr> <tr> <td><b><u>FINISHES:</u></b></td> <td style="text-align: right;"><b><u>Ref #</u></b></td> </tr> <tr> <td>Flooring:</td> <td></td> </tr> <tr> <td>    Sealed concrete</td> <td style="text-align: right;">033000</td> </tr> <tr> <td>Ceiling:</td> <td></td> </tr> <tr> <td>    Painted, exposed structure</td> <td style="text-align: right;">099100</td> </tr> <tr> <td>Walls:</td> <td></td> </tr> <tr> <td>    Painted concrete masonry units</td> <td style="text-align: right;">042000/ 099100</td> </tr> <tr> <td><b><u>LOOSE FURNISHINGS:</u></b></td> <td></td> </tr> <tr> <td>L1 (8) Workbenches with heavy-duty metal tops</td> <td></td> </tr> <tr> <td>L2 (24) Stools or chairs</td> <td></td> </tr> <tr> <td>    Wastebasket</td> <td></td> </tr> <tr> <td><b><u>Electronic Safety and Security:</u></b></td> <td></td> </tr> <tr> <td>    Life safety devices per code</td> <td style="text-align: right;">283111</td> </tr> <tr> <td><b><u>Miscellaneous:</u></b></td> <td></td> </tr> <tr> <td>    <b><i>Pencil sharpener (optional)</i></b></td> <td></td> </tr> <tr> <td><b>The following items to be funded by the School District:</b></td> <td></td> </tr> <tr> <td>    Paint booth, paint prep station, paint mixing station</td> <td></td> </tr> </table>		Spec.	<b><u>FINISHES:</u></b>	<b><u>Ref #</u></b>	Flooring:		Sealed concrete	033000	Ceiling:		Painted, exposed structure	099100	Walls:		Painted concrete masonry units	042000/ 099100	<b><u>LOOSE FURNISHINGS:</u></b>		L1 (8) Workbenches with heavy-duty metal tops		L2 (24) Stools or chairs		Wastebasket		<b><u>Electronic Safety and Security:</u></b>		Life safety devices per code	283111	<b><u>Miscellaneous:</u></b>		<b><i>Pencil sharpener (optional)</i></b>		<b>The following items to be funded by the School District:</b>		Paint booth, paint prep station, paint mixing station		<table border="0"> <tr> <td></td> <td style="text-align: right;">Spec.</td> </tr> <tr> <td><b><u>FEATURES<sup>1</sup>:</u></b></td> <td style="text-align: right;"><b><u>Ref.#</u></b></td> </tr> <tr> <td><b><u>Fixed Items:</u></b></td> <td></td> </tr> <tr> <td>F1 <b>24' of chalk/marker board, tack board, or tackable wall surface</b></td> <td style="text-align: right;">101100</td> </tr> <tr> <td><b>F2 Reserved</b></td> <td></td> </tr> <tr> <td>F3 24' of tall storage cabinets</td> <td style="text-align: right;">123550</td> </tr> <tr> <td>F4 Pencil sharpener support (<i>optional</i>)</td> <td style="text-align: right;">062000</td> </tr> <tr> <td>F5 (4) Paper towel dispensers</td> <td style="text-align: right;">102813</td> </tr> <tr> <td>F6 (2) 35'high x 45'long motorized overhead sectional doors to exterior</td> <td style="text-align: right;">083613</td> </tr> <tr> <td>F7 (2) 3'x7' hollow metal service doors to exterior</td> <td style="text-align: right;">081113</td> </tr> <tr> <td>F8 Steel bollards at overhead door, both sides</td> <td style="text-align: right;">055000</td> </tr> <tr> <td><b><u>Fire Suppression:</u></b></td> <td></td> </tr> <tr> <td>    Fire suppression system</td> <td style="text-align: right;">211000</td> </tr> <tr> <td><b><u>Plumbing:</u></b></td> <td></td> </tr> <tr> <td>P1 2 washfountains (minimum)</td> <td style="text-align: right;">224000</td> </tr> <tr> <td>P2 2 utility sinks (minimum)</td> <td style="text-align: right;">224000</td> </tr> <tr> <td>P3 3 hose bibbs (minimum)</td> <td style="text-align: right;">224000</td> </tr> <tr> <td>P4 Safety shower/eyewash</td> <td style="text-align: right;">224000</td> </tr> <tr> <td>P5 14 compressed air connections</td> <td style="text-align: right;">221500</td> </tr> <tr> <td>P6 2 floor drains</td> <td style="text-align: right;">224000</td> </tr> <tr> <td>P7 1 trench drain</td> <td style="text-align: right;">224000</td> </tr> <tr> <td>    Plumbing connections</td> <td style="text-align: right;">221116/221119/224000</td> </tr> <tr> <td><b><u>HVAC:</u></b></td> <td></td> </tr> <tr> <td>    Supply/return air system</td> <td style="text-align: right;">Div. 23</td> </tr> <tr> <td>    Independent temperature control</td> <td style="text-align: right;">230923</td> </tr> <tr> <td><b><u>Electrical:</u></b></td> <td></td> </tr> <tr> <td>    High intensity lighting or fluorescent lighting</td> <td style="text-align: right;">265100</td> </tr> <tr> <td>    Illumination level: See Table 8600-5</td> <td></td> </tr> <tr> <td>    Multilevel switching</td> <td style="text-align: right;">262726</td> </tr> <tr> <td>    40 duplex receptacles (minimum)</td> <td style="text-align: right;">262726</td> </tr> <tr> <td>    Double duplex receptacle adjacent to each data and video port</td> <td style="text-align: right;">262726</td> </tr> <tr> <td>    220v service</td> <td style="text-align: right;">262726</td> </tr> <tr> <td><b><u>Communications:</u></b></td> <td></td> </tr> <tr> <td>T1 1 video port and video display device</td> <td style="text-align: right;">271533/271543/274119</td> </tr> <tr> <td>T2 1 voice port and phone</td> <td style="text-align: right;">271513/<b>273123</b></td> </tr> <tr> <td>T3 4 data ports</td> <td style="text-align: right;">271513</td> </tr> <tr> <td>    Clock</td> <td style="text-align: right;">275313</td> </tr> <tr> <td>    Central sound system</td> <td style="text-align: right;">275123</td> </tr> </table>		Spec.	<b><u>FEATURES<sup>1</sup>:</u></b>	<b><u>Ref.#</u></b>	<b><u>Fixed Items:</u></b>		F1 <b>24' of chalk/marker board, tack board, or tackable wall surface</b>	101100	<b>F2 Reserved</b>		F3 24' of tall storage cabinets	123550	F4 Pencil sharpener support ( <i>optional</i> )	062000	F5 (4) Paper towel dispensers	102813	F6 (2) 35'high x 45'long motorized overhead sectional doors to exterior	083613	F7 (2) 3'x7' hollow metal service doors to exterior	081113	F8 Steel bollards at overhead door, both sides	055000	<b><u>Fire Suppression:</u></b>		Fire suppression system	211000	<b><u>Plumbing:</u></b>		P1 2 washfountains (minimum)	224000	P2 2 utility sinks (minimum)	224000	P3 3 hose bibbs (minimum)	224000	P4 Safety shower/eyewash	224000	P5 14 compressed air connections	221500	P6 2 floor drains	224000	P7 1 trench drain	224000	Plumbing connections	221116/221119/224000	<b><u>HVAC:</u></b>		Supply/return air system	Div. 23	Independent temperature control	230923	<b><u>Electrical:</u></b>		High intensity lighting or fluorescent lighting	265100	Illumination level: See Table 8600-5		Multilevel switching	262726	40 duplex receptacles (minimum)	262726	Double duplex receptacle adjacent to each data and video port	262726	220v service	262726	<b><u>Communications:</u></b>		T1 1 video port and video display device	271533/271543/274119	T2 1 voice port and phone	271513/ <b>273123</b>	T3 4 data 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**NOTES:**

1. Finishes/Features: Refer to Chapter 9 for specification references.



**17.0401 AIRCRAFT MAINTENANCE**

## CHAPTER 6: CAREER-TECHNICAL SCHOOL

**Parts Storage**

		Spec. Ref.#
<b>Program Type:</b>	7	
<b>Size Requirements:</b>	300 SF	
<b>Requirements:</b>		
<u>FINISHES:</u>	Spec. Ref #	
Flooring:		
Sealed concrete	033000	
Ceiling:		
Fire-rated gypsum drywall	092113	
Walls:		
Painted concrete masonry units	042000/ 099100	
<u>LOOSE FURNISHINGS:</u>		
N/A		
<u>ENVIRONMENTAL CONSIDERATIONS:</u>		
▪ Wall minimum STC 45		
▪ This room to be one-story (14'+/-) tall, located within high-bay program.		
		105613
		211000
		N/A
		Div. 23 Div. 23
		265100 262726 262726
		275123
		283111
		N/A

NOTES:

1. Finishes/Features: Refer to Chapter 9 for specification references.

**17.0401 AIRCRAFT MAINTENANCE  
Hazardous Material Storage**

CHAPTER 6: CAREER-TECHNICAL SCHOOL

<p><b>Program Type:</b> 7</p> <p><b>Size Requirements:</b> 60 SF</p> <p><b>Requirements:</b></p> <p><u>FINISHES:</u>                  Flooring:                  Sealed concrete</p> <p>Ceiling:                  Fire-rated gypsum drywall</p> <p>Walls:                  Painted concrete masonry units</p> <p><u>LOOSE FURNISHINGS:</u>                  N/A</p> <p><u>ENVIRONMENTAL CONSIDERATIONS:</u></p> <ul style="list-style-type: none"> <li>▪ Wall minimum STC 45</li> <li>▪ This room to be one-story (14'+/-) tall, located within high-bay program.</li> </ul>	<p style="text-align: right;">Spec. <u>Ref.#</u></p> <p><u>FEATURES<sup>1</sup>:</u>  <u>Fixed Items:</u>                  N/A</p> <p><u>Fire Suppression:</u>                  Fire suppression system 211000</p> <p><u>Plumbing:</u>                  N/A</p> <p><u>HVAC:</u>                  Supplemental heat as required Div. 23</p> <p><u>Electrical:</u>                  Fluorescent lighting 265100                  Illumination level: See Table 8600-5                  Single level switching 262726                  2 duplex receptacles 262726</p> <p><u>Communications:</u>                  Central sound system 275123</p> <p><u>Electronic Safety and Security:</u>                  Life safety devices per code 283111</p> <p><u>Miscellaneous:</u>                  N/A</p>
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NOTES:

1. Finishes/Features: Refer to Chapter 9 for specification references.

**01.0901 ANIMAL SCIENCE AND MANAGEMENT (EQUINE)**

CHAPTER 6: CAREER-TECHNICAL SCHOOL

**CT-P7-1**

<b><u>PROGRAM DESCRIPTION:</u></b>	Applies principles of anatomy and physiology, nutrition, reproduction, health, and genetics and behavior to the production, management, marketing, and training of domestic animals.	<b><u>FEATURES<sup>1</sup>:</u></b>	Spec.
<b>Program Type:</b>	7	<b><u>Fixed Items:</u></b>	<b><u>Ref.#</u></b>
<b>Size Requirements:</b>	8,000 SF Lab	180' of metal pipe rail fencing	055000
<b>Lab Requirements:</b>	Spec.	12' x 14'motorized overhead	
<b><u>FINISHES:</u></b>	<b><u>Ref #</u></b>	sectional door to exterior	083613
Flooring:	Compacted earth	3'x7' hollow metal service door	
Ceiling:	Painted, exposed structure	to exterior	081113
Walls:	Painted exposed structure	Steel bollards at overhead door,	
<b><u>LOOSE FURNISHINGS:</u></b>	N/A	both sides	055000
<b><u>SITE FEATURE:</u></b>	Plan for the following if required by school curriculum requirements:	<b><u>Fire Suppression:</u></b>	
Fenced riding area	099100	Fire suppression system	211000
	099100	<b><u>Plumbing:</u></b>	
		2 hose bibbs (minimum)	224000
		Plumbing connections	221116/221119/224000
		<b><u>HVAC:</u></b>	
		Supply/return air system	Div. 23
		Independent temperature control	230923
		<b><u>Electrical:</u></b>	
		High intensity lighting or fluorescent lighting	265100
		Illumination level: See Table 8600-5	
		Multilevel switching	262726
		12 duplex receptacles (minimum)	262726
		<b><u>Communications:</u></b>	
		1 voice port and phone	271513/ <b>273123</b>
		Clock	275313
		Central sound system	275123
		<b><u>Electronic Safety and Security:</u></b>	
		Life safety devices per code	283111
		<b><u>Miscellaneous:</u></b>	
		N/A	

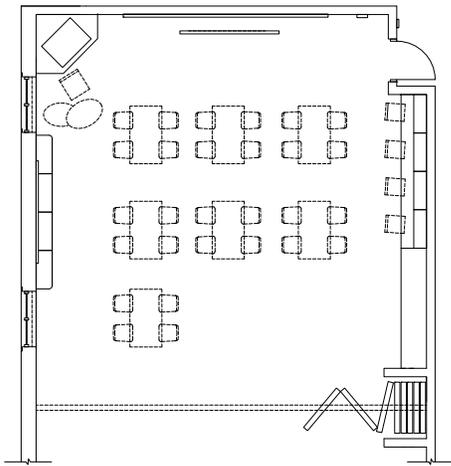
**NOTES:**

1. Finishes/Features: Refer to Chapter 9 for specification references.

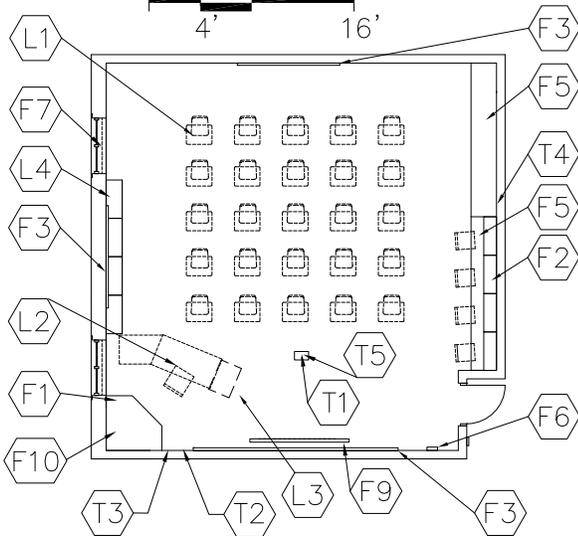
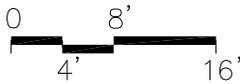


**RELATED CLASSROOM  
CT-P7-2**

**CHAPTER 6: CAREER-TECHNICAL HIGH SCHOOL**



CLASSROOM WITH OPTIONAL FOLDING WALL



TYPICAL CLASSROOM

**CAPACITY:** 25 students  
**SIZE:** 900 SF

**PROGRAM ACTIVITIES:**

- Large group, small group, and individual instruction
- Group and individual work
- Demonstrations
- Accommodates any of the core academic disciplines

**SPATIAL RELATIONSHIPS:**

- Near other related lab
- Near teacher prep area/workroom
- Classrooms should be located in academic "zone" that is away from noisy or public activities
- Classrooms with access to media center and administrative services
- Flexibility of space
- Proximity to main corridor to accommodate other students without interrupting lab

**ENVIRONMENTAL CONSIDERATIONS:**

- **Required:** View glass – minimum 5% without daylighting design; minimum 3% with daylighting design.  
**Recommended:** Daylighting design with glazing area determined by design solution.
- Environmental sound control -  
wall **only** minimum STC 45  
ceiling minimum CAC 35, NRC 0.70

**NOTES:**

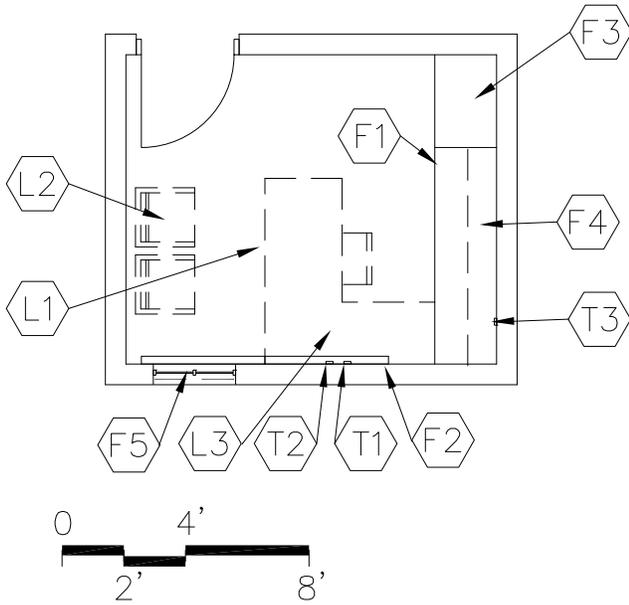
1. Loose furnishings shown represent one of many possible arrangements.
2. Depending upon the educational program of the district, a tall wardrobe may be placed in this classroom or could be placed in a teacher prep area/workroom.

**RELATED CLASSROOM  
CT-P7-2**
**CHAPTER 6: CAREER-TECHNICAL HIGH SCHOOL**

<u>FINISHES<sup>1</sup>:</u>	Spec. Ref.#	<u>FEATURES<sup>1</sup>:</u>	Spec. Ref.#
<u>Flooring:</u>			
Carpet <b>or carpet tile</b>	096816	F1 Tall wardrobe with file drawers	123550
Optional: linoleum, ET, or sheet vinyl	096516 096500 <b>096813</b>	F2 Computer work surface (could be loose)	123550
Base:		F3 <b>20'-32' combination chalk/marker board, tack board and tackable wall surface</b>	101100
Resilient base	096500	F4 <b>Reserved</b>	
Ceiling:		F5 <b>18'-24' combination base and wall cabinets</b>	123550
Suspended, acoustical	095113	F6 Pencil sharpener support ( <b>optional</b> )	062000
Walls:		F7 Windows with integral blinds	085113
Painted concrete masonry units	042000/099100	F8 <b>Reserved</b>	
		F9 Projection screen (optional)	115213
		F10 Technology support casework	123550
<u>LOOSE FURNISHINGS:</u>			
L1 Student desks and chairs		<u>Fire Suppression:</u>	
L2 Teacher desk or workstation/computer support and chair		Fire suppression system	211000
L3 File cabinet		<u>Plumbing:</u>	
L4 9' of low bookcases (fixed or mobile)		N/A	
Wastebasket		<u>HVAC:</u>	
		Supply/return air system	Div. 23
		Independent temperature control	230923
		<u>Electrical:</u>	
		Fluorescent lighting:	265100
		Illumination level: See Table 8600-5	
		Multilevel switching	262726
		4 duplex receptacles	262726
		Double duplex receptacle adjacent to each data and video port	262726
		<u>Communications:</u>	
		T1 1 video port	271533/271543
		T2 1 voice port and phone	271513/ <b>273123</b>
		T3 1 data port near teacher workstation	271513
		T4 4 data ports (minimum) for <b>classroom technology</b>	271513
		Clock	275313
		Central sound system	275123
		Sound reinforcement system	275127
		T5 Overhead projector	274119
		<u>Electronic Safety and Security:</u>	
		Life safety devices per code	283111
<u>Miscellaneous:</u>			
		<b>Pencil sharpener (optional)</b>	
M1 Operable partitions between classrooms are optional	102226		

**NOTES:**

1. Finishes/Features: Refer to Chapter 9 for specification references.
2. Technology components may be placed in a separate small cabinet, or integrated in the other casework in the room.
3. Where appropriate, some casework may be mobile to add flexibility and become part of the loose furnishings.



**PROGRAM ACTIVITIES:**

- Private space for program instructor
- One-on-one conferences with academic instructors, students, etc.

**SPATIAL RELATIONSHIPS:**

- Near related lab
- Direct access to school circulation areas

**ENVIRONMENTAL CONSIDERATIONS:**

- Environmental sound control -  
wall minimum STC 45  
ceiling minimum CAC 35, NRC 0.70

CAPACITY: 1 - 3 persons  
SIZE: 120 SF

**NOTES:**

1. Loose furnishings shown represent one of many possible arrangements.

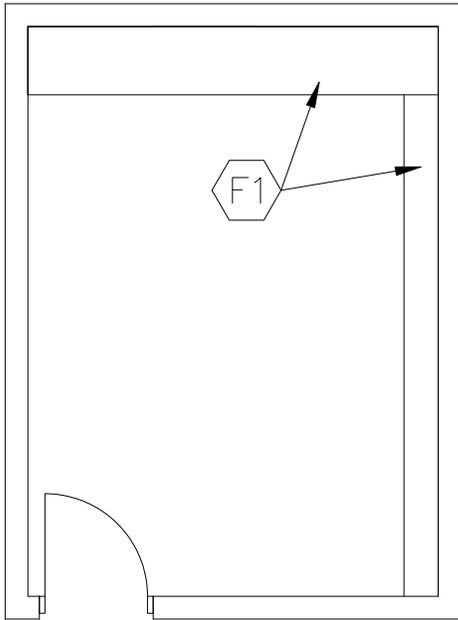
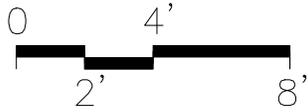
**OFFICE  
CT-P7-3**

## CHAPTER 6: CAREER-TECHNICAL SCHOOL

<u>FINISHES<sup>1</sup>:</u>	Spec. Ref.#	<u>FEATURES<sup>1</sup>:</u>	Spec. Ref.#
Flooring:		<u>Fixed Items:</u>	
Carpet or carpet tile	096816	F1 Work surface with file drawers	123550
	096813	F2 4' of tack board	101100
		or tackable wall surface	
Base:		F3 Tall wardrobe	123550
Resilient base	096500	F4 Wall cabinets above work surface	123550
Ceiling:		<u>Fire Suppression:</u>	
Suspended, acoustical	095113	Fire suppression system	211000
Walls:		<u>Plumbing:</u>	
Painted gypsum wallboard		N/A	
over metal studs	092116/099100		
<u>LOOSE FURNISHINGS:</u>		<u>HVAC:</u>	
L1 Desk and chair		Supply/return air system	Div. 23
L2 Visitor chairs		Independent temperature control	230923
L3 Computer desk return			
Wastebasket		<u>Electrical:</u>	
		Single level switching	262726
		Fluorescent lighting	265100
		Illumination level: See Table 8600-5	
		4 duplex receptacles	262726
		Double duplex receptacle adjacent	
		to data and video port	262726
		<u>Communications:</u>	
		T1 1 voice port and phone	271513/ <b>273123</b>
		T2 1 data port near workstation	271513
		T3 1 video port	271533/271543
		Central sound system	275123
		Clock	275313
		<u>Electronic Safety and Security:</u>	
		Life safety devices per code	283111
		<u>Miscellaneous:</u>	
		N/A	

NOTES:

1. Finishes/Features: Refer to Chapter 9 for specification references. Optional: moveable cabinets
2. Fixed casework and loose furnishings can also be all fixed casework or all loose furnishings.



**PROGRAM ACTIVITIES:**

- Space for storage of lab equipment

**SPATIAL RELATIONSHIPS:**

- Near related lab

**ENVIRONMENTAL CONSIDERATIONS:**

N/A

CAPACITY:  
SIZE:

N/A  
200 SF

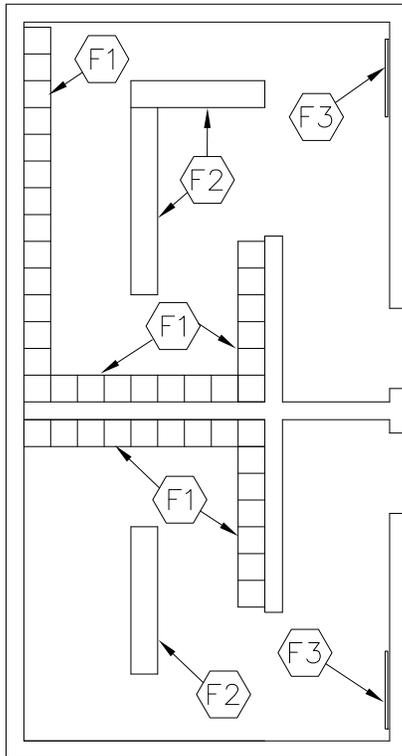
NOTES:

**STORAGE AREA  
CT-P7-4**
**CHAPTER 6: CAREER-TECHNICAL SCHOOL**

	Spec. Ref.#		Spec. Ref.#
<u>FINISHES<sup>1</sup>:</u>		<u>FEATURES<sup>1</sup>:</u>	
Flooring:		<u>Fixed Items<sup>1</sup>:</u>	
<b>Sealed</b> concrete	033000	F1 8'-20' of open shelving	
		Depth may vary (fixed or loose)	123550
Base:		<u>Fire Suppression:</u>	
Resilient base	096500	Fire suppression system	211000
Ceiling:		<u>Plumbing:</u>	
Exposed structure	---	N/A	
Walls:		<u>HVAC:</u>	
Painted concrete masonry units	042000/099100	To be determined by Design Professional	
		Supplemental heat as required	Div. 23
<u>LOOSE FURNISHINGS:</u>		<u>Electrical:</u>	
N/A		Single level switching	262726
		Fluorescent lighting	265100
		Illumination level: See Table 8600-5	
		Duplex receptacles	262726
		<u>Communications:</u>	
		N/A	
		<u>Electronic Safety and Security:</u>	
		Life safety devices per code	283111
		<u>Miscellaneous:</u>	
		N/A	

**NOTES:**

1. Finishes/Features: Refer to Chapter 9 for specification references.



50 total lockers

CAPACITY: N/A  
 SIZE: 9 SF per student (see Note 2)

**PROGRAM ACTIVITIES:**

- Personal and health needs for the program Specific users.
- Changing of clothes and/or uniforms.
- Storage of personal items while students are in lab.

**SPATIAL RELATIONSHIPS:**

- Adjacent to related lab

**ENVIRONMENTAL CONSIDERATIONS:**

- Sanitary and durable finishes.
- Environmental sound control  
 Wall minimum STC 40  
 Ceiling minimum CAC 35, NRC 0.70

**NOTES:**

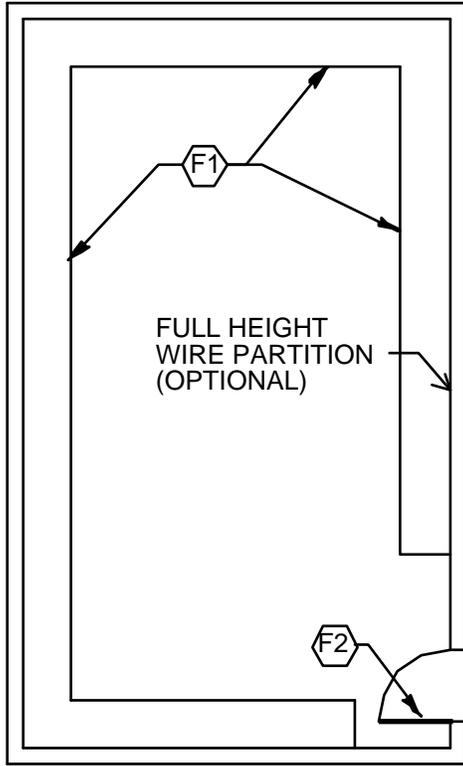
1. Large and small changing areas are interchangeable for either males or females. Determination based on male/female ratio within each program.
2. Student count determined by total number of approved program spaces Types 5, 6, and 7 times 30.

**CHANGING ROOM  
CT-P7-5**
**CHAPTER 6: CAREER-TECHNICAL SCHOOL**

<u>FINISHES<sup>1</sup>:</u>	Spec. Ref.#	<u>FEATURES<sup>1</sup>:</u>	Spec. Ref.#
<u>Flooring:</u>		<u>Fixed Items<sup>1</sup>:</u>	
Polished concrete finishing, or colored concrete finishing	033510 033519	F1 Student lockers	105113
Optional: linoleum or rubber	096500 096516	F2 Locker benches	062000
		F3 24" x 60" mirror	102813
<u>Base:</u>		<u>Fire Suppression:</u>	
Resilient base	096500	Fire suppression system	211000
<u>Ceiling:</u>		<u>Plumbing:</u>	
Suspended, acoustical with high impact hold down clips	095113	N/A	
<u>Walls:</u>		<u>HVAC:</u>	
Painted concrete masonry units	042000 / 099100	Supply/Return air system	Div. 23
		Exhaust air system	Div. 23
		Supplemental heat as required	Div. 23
		Individual temperature control	230923
<u>LOOSE FURNISHINGS</u>		<u>Electrical:</u>	
Wastebaskets		Single level switching	262726
		Fluorescent lighting	265100
		Illumination level: See Table 8600-6	
		2 Duplex receptacles	262726
		Means of egress lighting per code	265100
		<u>Communications:</u>	
		Clock	275313
		Central Sound System	275123
		<u>Electronic Safety and Security:</u>	
		Life safety devices per code	283111
		<u>Miscellaneous:</u>	
		N/A	

**NOTES:**

1. Finishes/Features: Refer to Chapter 9 for specification references.



**PROGRAM ACTIVITIES:**

- Storage of program related tools and instruments.
- Storage of students' tools.

**SPATIAL RELATIONSHIPS:**

- Adjacent to related lab

**ENVIRONMENTAL CONSIDERATIONS:**

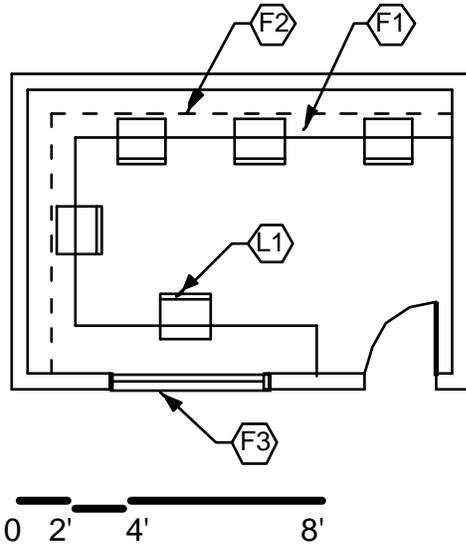
- Sanitary and durable finishes

CAPACITY:  
SIZE:  
ANCILLARY SPACES:

N/A  
550 SF

NOTES:





PROGRAM ACTIVITIES:

- Individual computer research.
- Reference program specific manuals.
- Small group meetings.

SPATIAL RELATIONSHIPS:

- Adjacent to related lab

ENVIRONMENTAL CONSIDERATIONS:

- Sanitary and durable finishes
- Environmental sound control
  - Wall **only** minimum STC **45**
  - Ceiling minimum CAC 35, NRC 0.70

CAPACITY:  
SIZE:

N/A  
200 SF

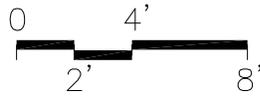
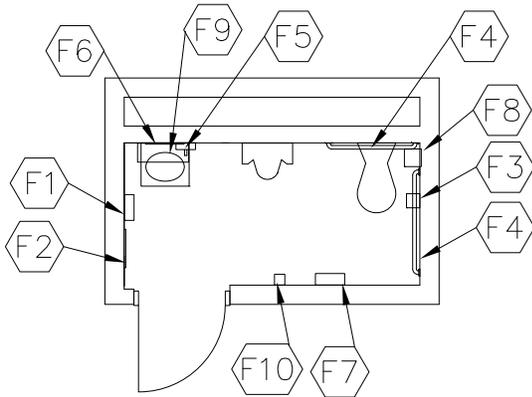
NOTES:

**REFERENCE ROOM  
CT-P7-7**
**CHAPTER 6: CAREER-TECHNICAL SCHOOL**

	Spec. Ref.#		Spec. Ref.#
<b><u>FINISHES</u><sup>1</sup>:</b>		<b><u>FEATURES</u><sup>1</sup>:</b>	
Flooring:		<b><u>Fixed Items:</u></b>	
<b>Sealed</b> concrete	033000	F1 34' of plastic lam. counter	062000
Optional: rubber	096500	F2 27' of adjustable shelving	062000
Base:		F3 Interior window	081113/ 088000
Resilient base	096500	<b><u>Fire Suppression:</u></b>	
Ceiling:		Fire suppression system	211000
Suspended, acoustical	095113	<b><u>Plumbing:</u></b>	
Walls:		N/A	
Painted concrete masonry units	042000 / 099100	<b><u>HVAC:</u></b>	
<b><u>LOOSE FURNISHINGS</u></b>		Supply/return air system	Div. 23
L3 Student chairs		Exhaust air system	Div. 23
Wastebasket		Supplemental heat as required	Div. 23
		<b><u>Electrical:</u></b>	
		Single level switching	262726
		Fluorescent lighting	265100
		Illumination level: See Table 8600-5	
		2 Duplex receptacles	262726
		Duplex receptacle adjacent to	
		Each data and video port	262726
		<b><u>Communications:</u></b>	
		T1 6 data ports	271513
		<b><u>Electronic Safety and Security:</u></b>	
		Life safety devices per code	283111
		<b><u>Miscellaneous:</u></b>	
		N/A	

**NOTES:**

1. Finishes/Features: Refer to Chapter 9 for specification references.



**PROGRAM ACTIVITIES:**

- Personal and health needs for the program
- Specific users
- Changing of clothes and/or uniforms.

**SPATIAL RELATIONSHIPS:**

- Adjacent to related lab

**ENVIRONMENTAL CONSIDERATIONS:**

- Sanitary and durable finishes.
- Environmental sound control  
 Wall minimum STC 48  
 Ceiling minimum CAC 35, NRC 0.70

CAPACITY:  
SIZE:

N/A  
68 SF

NOTES:

**TOILET ROOM  
CT-P7-8**
**CHAPTER 6: CAREER-TECHNICAL SCHOOL**

	Spec. Ref.#		Spec. Ref.#
<b><u>FINISHES<sup>1</sup>:</u></b>		<b><u>FEATURES<sup>1</sup>:</u></b>	
Flooring:		<b><u>Fixed Items:</u></b>	
<b>Sealed concrete</b>	<b>093000</b>	F1 Towel dispenser	102813
Optional: Rubber	096500	F2 24" x 60" mirror	102813
Base:		F3 Toilet tissue holder	102813
Resilient base	096500	F4 36" and 42" grab bars	102813
Ceiling:		F5 Soap dispenser	102813
Suspended, acoustical	095113	F6 16" x 24" mirror	102813
Walls:		F7 Sanitary product dispenser	102813
Painted concrete masonry units		F8 Sanitary product receptacle	102813
	042000 / 099100	F9 Stainless steel shelf (optional)	102813
		F10 Coat hook	102813
<b><u>LOOSE FURNISHINGS</u></b>		<b><u>Fire Suppression:</u></b>	
Wastebaskets		Fire suppression system	211000
		<b><u>Plumbing:</u></b>	
		Plumbing connections	221116/221119/224000
		<b><u>HVAC:</u></b>	
		Supply/return air system	Div. 23
		Exhaust air system	Div. 23
		Supplemental heat as required	Div. 23
		Individual temperature control	230923
		<b><u>Electrical:</u></b>	
		Single level switching	262726
		Fluorescent lighting	265100
		Illumination level: See Table 8600-5	
		2 Duplex receptacles	262726
		Means of egress lighting per code	265100
		<b><u>Communications:</u></b>	
		Clock	275313
		<b><u>Electronic Safety and Security:</u></b>	
		Life safety devices per code	283111
		<b><u>Miscellaneous:</u></b>	
		N/A	

**NOTES:**

1. Finishes/Features: Refer to Chapter 9 for specification references.