

# FACILITY SYSTEMS TECHNOLOGY

2009-2010 Program Options:

Facility Systems Commercial Certificate (30)

Facility Systems Technician Diploma (48)

Facility Systems Technology AAS (64)

## Occupational Certificate: Commercial

**Total Number of Credits: 30**

**Program Description:** This certificate prepares students for employment in multi-unit housing, commercial buildings (entry level), office buildings, restaurants and community centers.

**Application Requirements:** High School Graduate or GED; ability to use hand and power tools, climb ladders, lift heavy objects, and mobility to gain access to parts of mechanical systems.

**Career/Occupational Requirements: 27 credits**

|           |   |   |
|-----------|---|---|
| FST 1000  | Construction Technology                                   | 4 |
| FST 1020  | Plumbing Basics   | 3 |
| FST 1030  | Basic Electricity   | 3 |
| FST 1033  | Basic Electrical Systems                                  | 3 |
| FST 1060  | Lock, Keys, and Security                                  | 2 |
| HLTH 1003 | Workers Right to Know: Health and Safety in the Workplace | 1 |
| HVAC 1041 | Basic Refrigeration I                                     | 3 |
| HVAC 1060 | Fundamentals of Heating                                   | 2 |
| HVAC 1073 | Hydronic Heating/Boilers                                  | 3 |
| WLDG 1001 | Intro to Oxyacetylene                                     | 2 |
| WLDG 1021 | Intro to ARC Welding                                      | 1 |

**General Education/MnTC Requirements: 3 credits**

**Goal 1 – Communication: 3 credits**

Select **ONE** of the following communication courses:

|           |                                 |   |
|-----------|---------------------------------|---|
| ENGL 1021 | Composition I                   | 4 |
| COMM 1021 | Fundamentals of Public Speaking | 3 |
| COMM 1031 | Interpersonal Communication     | 3 |
| COMM 1041 | Small Group Communication       | 3 |
| COMM 1051 | Intercultural Communication     | 3 |

## Diploma: Facility Systems Technician

**Total Number of Credits: 48**

**Program Description:** This diploma prepares students for employment in residential office buildings, restaurants, hotels, hospitals, community centers and commercial facilities with emphasis given to advanced facility systems and computerized maintenance management systems.

**Application Requirements:** High School graduate or GED; ability to use hand and power tools, climb ladders, lift heavy objects and mobility to gain access to parts of mechanical systems

**Career/Occupational Requirements: 37 credits**

|           |  |   |
|-----------|--|---|
| FST 1000  | Construction Technology                                  | 4 |
| FST 1020  | Plumbing Basics  | 3 |
| FST 1030  | Basic Electricity  | 3 |
| FST 1033  | Basic Electrical Systems                                 | 3 |
| FST 1060  | Locks, Keys, and Security                                | 2 |
| FST 2020  | Auxiliary Electrical Systems                             | 3 |
| FST 2050  | Computerized Maintenance Systems                         | 2 |
| HLTH 1003 | Worker Right to Know: Health and Safety in the Workplace | 1 |
| HVAC 1041 | Basic Refrigeration I                                    | 3 |
| HVAC 1042 | Basic Refrigeration II                                   | 3 |
| HVAC 1060 | Fundamentals of Heating                                  | 2 |
| HVAC 1069 | Heat Pumps, Chillers, & Electric Heat                    | 2 |
| HVAC 1073 | Hydronic Heating/Boilers                                 | 3 |
| WLDG 1001 | Intro to Oxyacetylene Welding                            | 2 |
| WLDG 1021 | Intro to ARC Welding                                     | 1 |

**Career/Occupational Electives: 5 credits**

Select **5 credits** from the following courses:

|           |                                 |   |
|-----------|---------------------------------|---|
| CAPL 1000 | Computer Literacy               | 1 |
| FST 2000  | Introduction to Hydraulics      | 3 |
| FST 2030  | Forced Air Systems and Controls | 2 |
| HVAC 1067 | Gas Heat                        | 4 |

**General Education/MnTC Requirements: 6 credits**

**Goal 1 - Communication: 3 credits**

Select **ONE** of the following communication courses:

|           |                                 |   |
|-----------|---------------------------------|---|
| ENGL 1021 | Composition I                   | 4 |
| COMM 1021 | Fundamentals of Public Speaking | 3 |
| COMM 1031 | Interpersonal Communication     | 3 |
| COMM 1041 | Small Group Communication       | 3 |
| COMM 1051 | Intercultural Communication     | 3 |

**General Education/MnTC electives**

**2-3**

See MnTC course list for options.

## Important Telephone Numbers: (651 Area Code)

|                      |          |
|----------------------|----------|
| Admission Office     | 773-1700 |
| Counseling Office    | 779-3285 |
| Financial Aid Office | 779-3305 |

## Program Instructors:

|               |                   |          |
|---------------|-------------------|----------|
| Dick Charest  | Office: 1282 East | 773-1788 |
| Doug Milbrath | Office: 1282 East | 779-3248 |

**Associate in Applied Science Degree: Facility Systems Technology****Total Number of Credits: 64**

**Program Description:** This AAS Degree prepares students for employment in residential office buildings, restaurants, hotels, hospitals, community centers and commercial facilities with emphasis given to advanced facility systems and computerized maintenance management systems. The general education required courses would help insure individuals have the necessary oral, written, and critical thinking skills to help with their professional responsibilities.

**Application Requirements:** High School graduate or GED; ability to use hand and power tools, climb ladders, lift heavy objects and mobility to gain access to parts of mechanical systems.

**Career/Occupational Requirements: 41 credits**

|           |  |   |
|-----------|--|---|
| FST 1000  | Construction Technology                                  | 4 |
| FST 1020  | Plumbing Basics  | 3 |
| FST 1030  | Basic Electricity  | 3 |
| FST 1033  | Basic Electrical Systems                                 | 3 |
| FST 1060  | Locks, Keys, and Security                                | 2 |
| FST 2020  | Auxiliary Electrical Systems                             | 3 |
| FST 2050  | Computerized Maintenance Systems                         | 2 |
| HLTH 1003 | Worker Right to Know: Health and Safety in the Workplace | 1 |
| HVAC 1041 | Basic Refrigeration I                                    | 3 |
| HVAC 1042 | Basic Refrigeration II                                   | 3 |
| HVAC 1060 | Fundamentals of Heating                                  | 2 |
| HVAC 1067 | Gas Heat   | 4 |
| HVAC 1069 | Heat Pumps, Chillers, and Electric Heat                  | 2 |
| HVAC 1073 | Hydronic Heating/Boilers                                 | 3 |
| WLDG 1001 | Intro to Oxyacetylene Welding                            | 2 |
| WLDG 1021 | Intro to ARC Welding                                     | 1 |

**Career/Occupational Electives: 3 credits**

|           |                                 |   |
|-----------|---------------------------------|---|
| CAPL 1000 | Computer Literacy               | 1 |
| FST 2000  | Introduction to Hydraulics      | 3 |
| FST 2030  | Forced Air Systems and Controls | 2 |

**General Education/MnTC Requirements: 20 credits**

*Four (4) credits beyond the minimums are needed to reach 20 credits. See MnTC course list for options.*

**Goal 1 - Communication: 7 credits**

|  |                                 |   |
|--|---------------------------------|---|
| ENGL 1021  | Composition I                   | 4 |
| Select <b>ONE</b> of the following COMM courses: |                                 | 3 |
| COMM 1021  | Fundamentals of Public Speaking |   |
| COMM 1031  | Interpersonal Communication     |   |
| COMM 1041  | Small Group Communication       |   |
| COMM 1051  | Intercultural Communication     |   |

**Goal 2 – Critical Thinking is automatically fulfilled when all other MnTC goals are complete.**

**Goal 3 and/or Goal 4 – Sciences/Math/Logical Reasoning: 3 credits**

**Goal 5 – History/Social and Behavioral Sciences: 3 credits**

**Goal 6-Humanities and Fine Arts: 3 credits**

**Goals 7-10: Three credits in one of these four goals (Fulfilled by COMM course)**

**General Requirements:**

1. Certificates: Up to 30 earned college-level credits; one third of credits must be earned at Century College.  
Diplomas: 31 to 48 earned college-level credits; one third of credits must be earned at Century College.  
AAS: At least 64 earned college-level credits (numbered 1000 or above). At least 20 credits must be earned at Century College.
2. Century college-level GPA of 2.0; Required career and occupational courses GPA of 2.0; MnTC GPA of 2.0.
3. A grade of C or higher in ENGL 1021 (for Diplomas and 30 credit Certificates ONLY IF this is the Goal 1 course selected.) (Exception: 16 credit certificates)

**Assessment:** *Assessments are required for all students* before registering for classes. Students may be required to take developmental courses in English, Reading and Mathematics based upon their assessment scores. For important information and exemptions see [www.century.edu/futurestudents/assessment](http://www.century.edu/futurestudents/assessment).

**References to the Minnesota General Education Transfer Curriculum (MnTC):** On this guidesheet, notations such as “Goal 1-Communication: 3 credits” are used to refer to the goals of the Minnesota General Education Transfer Curriculum. Refer to the MnTC Course List for the specific courses from which students may choose to fulfill the MnTC requirements of the program, found in the catalog, the Counseling Center and on the Century website. Students should be aware that it may be necessary to select additional MnTC credits beyond the minimum required in each goal area, to reach the total MnTC/General Education credits required for their program.

**Career Information:** Counselors are available in the Counseling and Career Center, Room 2400 West, to assist with educational and career planning. Resources available include career interest and personality inventories and print and web-based occupational and educational information, e.g., occupational descriptions, employment outlook, earnings, education/training requirements and sources. Consult the **GPS LifePlan** link on the Century website for information on these and more resources for your career, work, and educational planning!

**Transfer:** Some programs are intended primarily for employment preparation rather than transfer to a four-year institution. Some courses may not transfer to a number of four-year colleges. If you are considering the possibility of transfer, you may wish to talk with a counselor or the program instructor before registering to discuss your goals and look at programs designed for transfer.

**Time Limit for Meeting Graduation Requirements:** See Century College catalog “Graduation” for information.

**Academic Petitions:** Any exceptions to the program requirements must be petitioned through the Vice President of Academic Affairs.

**Cost:** In addition to tuition costs, supplies for the entire program will cost approximately \$750. These costs are subject to change.