

Apprenticeship Program Standards



VCU Facilities Management

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PURPOSE AND OBJECTIVES

The Virginia Commonwealth University (VCU) Apprentice Program provides individuals interested in pursuing a career as a skilled tradesperson with the opportunity to participate in a four-year program to receive structured, on-the-job training, technical education and classroom instruction. The program is designed to establish and maintain high standards of work performance through the development of skills and knowledge. It also provides promotional opportunities for candidates and an avenue for entry into the skilled trades for individuals with little to no training in the field they are pursuing.

The program operates under training standards established by VCU Facilities Management leadership in accordance with state and federal laws.

These program standards are designed to guide the apprentice and the university through the apprenticeship process and detail program operations.

VCU is an equal opportunity/affirmative action institution providing access to education and employment without regard to race, color, religion, national origin, age, sex, political affiliation, veteran status, genetic information, sexual orientation, gender identity, gender expression or disability.

PROGRAM OVERSIGHT

VCU Human Resources, in partnership with the Virginia Department of Labor and Industry (DOLI) and VCU Facilities Management leadership, oversees the Apprentice Program. Administration oversight is led by the apprenticeship program manager which includes, but not limited to, recruitment, training oversight, program enhancements and records management.

Facilities Management directors, managers and supervisors responsible for program oversight are responsible for implementation and administration of the procedures and guidelines detailed in these program standards.

These standards may be modified at any time with the approval of the DOLI.

PROGRAM RECRUITMENT

The apprenticeship program manager determines when apprentices should be recruited, which vary annually based on the business needs of Facilities Management. If positions are available, Facilities Management will conduct recruitment efforts by posting and advertising vacant positions as well as accepting applications in accordance with VCU employment policies.

The apprenticeship program manager will establish a selection committee to review applications and recommend candidates for each trade being recruited.

The selection committee should include at least four members such as:

1. A supervisor from the unit seeking an apprentice
2. A representative from the trade being recruited
3. A representative from Human Resources, who will serve as committee chair
4. A representative from Facilities Management senior management

APPLICANT REQUIREMENTS

Apprenticeship applicants must meet the following requirements:

1. Meet the minimum requirements for the trade they are applying for
2. Have a high school diploma or General Education Development certificate before they begin employment
3. Be at least 18 years of age by the apprenticeship start date
4. Able to meet physical requirements for the trade
5. Pass comprehensive reference and background checks

OPERATION AND ADMINISTRATION

Apprenticeship program agreements

Individuals who are accepted into the Apprenticeship Program must sign paperwork agreeing to work for VCU, such as the VCU Apprenticeship Program Agreement..

Acceptance of agreement for current university employees

Upon acceptance into the Apprenticeship Program, any current university employees must vacate their existing position.

Cancellation of agreement

The Apprenticeship Program Agreement can be cancelled by Facilities Management if the apprentice is not fulfilling the mandatory on-the-job and/or academic requirements. It can also be cancelled in the event of a lay-off situation, which would be administered in accordance with VCU's lay-off policy.

The apprentice may voluntarily terminate the agreement through written notification, which may result in separation from the university. However, an apprentice may voluntarily leave the program and remain employed at the university if they successfully compete for and accept an offer for another vacant university position.

Probationary period

Apprentices who were not previously employed by VCU are subject to a probationary period of at least one-year, as outlined by university employment policies.

Credit for previous training and work experience in the trade

After successful completion of the probationary period, an apprentice may request that the apprentice program manager evaluate prior experience and training for credit towards the program requirements. This experience must be documented by a journey-level tradesperson and will be measured against the work process training required for their trade. Decisions regarding advancement will be made in conjunction with recommendations from Facilities Management and the DOLI and will not exceed 12 months of credit toward program requirements. Any credit that is awarded for prior experience will be formally documented by VCU.

Apprentice supervision

Upon hire, apprentices are assigned to the appropriate Facilities Management unit. In order to meet specific training needs as outlined in the apprentice work process, apprentices may be rotated to another trade within the unit, if necessary. Rotations will typically occur during the apprentice's second and third year, providing apprentices with training opportunities in their trade in the first and fourth year of the program. The apprentice's mentor in conjunction with the unit supervisor will complete a monthly assessment and semi-annual proficiency evaluation to monitor progress.

Certification

Apprentices who complete their academic work and job-related training and pass the state licensure certification exam, as applicable, will be awarded a diploma from Facilities Management and will be promoted to the journey level. If they have not met this criteria within six months of completing the academic instruction and job-related training, they will be subject to appropriate actions which may include an extension of this certification period for an additional three months, with approval from the apprentice program manager and Facilities Management management. Other potential actions will be determined in accordance with the standards of conduct.

CURRICULUM

Classroom instruction

Apprentices are required to complete 576 hours of related classroom instruction to learn technical, workforce and academic competencies applicable to their trade. Apprentices will take one or two class(es) per semester, depending on the institution's requirement, for a total of six to eight classes to be completed over the course of four years. Classes are offered through Associated Builders and Contractors, Inc.

Apprentices are required to regularly attend classes, complete assignments and pass the class with a minimum C average grade. Apprentices are subject to the rules and policies of the institutions they attend.

On-the-job training

Apprentices are also required to complete 8,000 hours of on-the-job training as designated by DOLI with licensed journeymen, mentors and supervisors at VCU. This training is developed through mapping the skills and knowledge that the apprentice must learn over the course of the program to excel in the job.

On-the-job evaluation and assessment

The evaluation and assessment methods below mark the apprentice's progress. Apprentices must also comply with the annual performance evaluation requirement for all university employees.

Monthly assessment

Supervisors complete a monthly assessment to evaluate the apprentice's on-the-job performance, overall progress, areas for improvement, etc. During the assessment, the apprentice can make comments, offer suggestions and discuss their progress.

Proficiency evaluation

Supervisors conduct a proficiency evaluation of the apprentice twice per year, in accordance with the academic calendar. It measures the apprentice's proficiency of the responsibilities associated with their trade as detailed in the appropriate work processes (see pages 7-9). It will also help determine the best trade placement for the apprentice as they acquire skills and rotate through the program. Levels of proficiency will be rated as: independently proficient, performed with supervision, limited practice, observed and no exposure.

Academic evaluation and assessment

As students, apprentices are subject to the policies of the institution where they are receiving classroom instruction, which in most cases are not VCU. Apprentices are required to attend classes regularly, successfully complete assignments and achieve grades of "C" or higher in all related classes. Expenses associated with academic instruction, such as course fees and books, are paid for by the Apprenticeship Program. The apprentice shall not receive any compensation for time spent attending, studying and preparing for related classroom instruction.

The institution offering academic training will submit reports for the apprentice's attendance and academic progress to the apprenticeship program manager. Matters for concern, such as absences and/or unsatisfactory interim grades, will be relayed to Facilities Management leadership so that the apprentice can receive assistance/counsel.

At the end of each academic term, a progress summary will be shared with the apprentice, their supervisor, apprenticeship program manager and leadership.

If the apprentice incurs more than three absences (totaling more than nine hours), they will be dropped from the class and required to re-take the class at a later date. Likewise, the apprentice's failure to meet academic standards by achieving a grade of "C" or higher will result in the course being repeated until they receive a grade of "C" or higher.

Matters of persistent instructional concern

If the apprentice continually exhibits on-the-job and/or academic deficiencies despite counseling, management will coordinate with the apprenticeship program manager to develop a plan of corrective action. Such action will be taken in accordance with state and university policies including, but not limited to, these standards of conduct and VCU Human Resources policy.

Advancement

Based on their academic and on-the-job performance, management may formally recommend that the apprentice continue to advance through the program. If management does not recommend that the apprentice continue, management and the apprentice program manager will design a performance improvement plan with remedial instruction and/or on-the-job training, which may include the issuance of a notice of improvement needed in accordance with state and university policies.

Virginia Commonwealth University Facilities Management

APPRENTICESHIP PROGRAM AGREEMENT

This agreement, entered into this _____ day of _____, 20____, between Facilities Management on behalf of the Virginia Commonwealth University (the "university"), and _____ (the "apprentice") witnesses that:

1. The apprentice has applied for employment at the university and been accepted into the Facilities Management Apprenticeship Program in the trade of _____. During the term of such employment, Facilities Management will provide on-the-job skills training and will provide for the apprentice's enrollment and participation in academic courses required for the program. The apprentice agrees to:
 - a. Diligently and faithfully perform the work assigned such that the trade may be proficiently learned,
 - b. Maintain accurate records of on-the-job and academic training received,
 - c. Satisfactorily complete the required hours of on-the-job and academic instruction prescribed for the trade as provided under the Apprentice Program Standards,
 - d. Conduct themselves at all times in accordance with the Commonwealth of Virginia standards of conduct and university policies.
2. The apprentice will be an employee of the university only in connection with their work within Facilities Management and will be paid for such work in accordance with state and university compensation policies. Other terms and conditions of such employment shall be the same as those applicable to other university and state employees.
3. The apprentice's continued eligibility for the Apprenticeship Program shall be subject to achieving satisfactory progress both in the on-the-job and academic training areas.
4. The Apprentice Program Standards as presently in force and as amended from time to time, shall apply to and govern all matters related to the Apprenticeship Program and the apprentice's participation therein.
5. The apprentice is required to complete 8,000 hours of on-the-job training hours as well as fulfill the academic requirements specified by the Virginia Department of Labor and Industry. When applicable, the apprentice must pass the Commonwealth of Virginia's journeyman exam, which may include credit granted under the program for previous craft experience, if any.

The apprentice acknowledges receipt of a copy of this agreement, the Apprentice Program Standards and states that they have read, understand and accept all terms and conditions thereof.

<NAME>

Apprenticeship program manager

<NAME>

Apprentice

ELECTRICIAN WORK PROCESS

47-2111.00

1. Independently assign, perform and complete regularly scheduled preventative maintenance to electrical distribution systems, lighting systems, fire alarm systems, electrical portion of laboratory and mechanical equipment, motors, variable frequency drives and other electrical equipment/systems. Approximate cumulative hours: 2,400
2. Install new electrical systems in existing buildings utilizing standard practices and tools of the electrical occupation. Approximate cumulative hours: 800
3. Provide on-the-job craft-skills training to other members of the maintenance team using in-depth knowledge of the electrical occupation. Monitors work of contractors and support shop employees to assure compliance with specifications, codes and drawings. Approximate cumulative hours: 2,000
4. Advise supervision and/or management by recommending equipment maintenance tasks and identifying the equipment needing priority attention. Approximate cumulative hours: 800
5. Provide work-site guidance and direct other members of the zone maintenance team assuring safe, orderly and timely completion of service calls and projects. Approximate cumulative hours: 800
6. Communicate directly with building occupants and supervisors to provide information and status of system problems, estimated completion times, and effect of system problems on occupant safety and comfort, as required to insure customer satisfaction. Approximate cumulative hours: 400
7. Identify, locate and order parts required to maintain and repair equipment. Approximate cumulative hours: 400
8. Formal training in safety procedures in accordance with Occupational Safety and Health Administration (OSHA) regulations, including hazardous materials and work environment. Identification and proper use of safety equipment including personal protective equipment (PPE). Working in a safe manner with other trades and building occupants. Jobsite and workplace organization and cleanliness. Identification, use, care and repair of tools and specialized equipment. Reading and understanding blueprints as they pertain to building layout and all affected trades. Approximate cumulative hours: 576

Total hours: 8,000

Safety is the first priority of the Apprenticeship Program and, as the sponsor's primary responsibility, must be taught and practiced continually in all on-the-job processes.

HVAC TECHNICIAN WORK PROCESS

49-9021.01

1. Independently identify, assign, respond and complete service work orders requiring diagnosis and repair of air-handling units, fan-coil units, heat pumps, refrigerators, compressors and other HVAC equipment. Approximate cumulative hours: 2,400
2. Install new HVAC systems in existing buildings utilizing knowledge of HVAC and refrigeration fundamentals and all tools of the HVAC occupation. Approximate cumulative hours: 800
3. Independently assign, perform and complete regularly scheduled preventative maintenance to centrifugal pumps, heat exchangers, motors, fans, piping for condenser water, chilled water, electronic and pneumatic controls, electrical wiring, drain piping, radiators and other HVAC equipment. Approximate cumulative hours: 2,000
4. Advise supervision and/or management by recommending equipment maintenance tasks identifying equipment needing priority attention. Approximate cumulative hours: 800
5. Communicate with building occupants and supervision regarding work, schedules, system problems, estimated completion time, effects of system problems on occupant safety and comfort. Approximate cumulative hours: 800
6. Monitor work of contractors to assure compliance with specification codes and drawings. Approximate cumulative hours: 400
7. Provide work site guidance and assistance to other members of the zone maintenance team, assuring safe and orderly completion of service calls and projects. Approximate cumulative hours: 400
8. Formal training in safety procedures in accordance with OSHA regulations, including hazardous materials and work environment. Identification and proper use of safety equipment including PPE. Working in a safe manner with other trades and building occupants. Jobsite and workplace organization and cleanliness. Identification, use, care and repair of tools and specialized equipment. Reading and understanding blueprints as they pertain to building layout and all affected trades. Approximate cumulative hours: 400

Total hours: 8,000

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PLUMBER WORK PROCESS

47-2152.02

1. Independently identify, assign respond and complete service work orders requiring diagnoses and repair of condensate pumps, heat exchangers, high pressure, high temperature steam lines, back flow prevention systems, medical/dental gas manifolds, plumbing fixtures including sinks, toilets, showers, using assorted fittings, gaskets, coupling, traps, valves, and soldering or welding connections and utilizing specialized knowledge of the plumbing trade. Approximate cumulative hours: 2,400
2. Install new plumbing systems in existing building utilizing tools, materials and all tools of the plumbing occupation. Approximate cumulative hours: 800
3. Independently assign, perform and complete regularly scheduled preventative maintenance to condensate pumps, heat exchangers, high pressure/high temperature steam lines and other equipment/systems. Approximate cumulative hours: 2,000
4. Use plumbing knowledge to monitor work of contractors to assure compliance with specifications, codes and drawings. Approximate cumulative hours: 800
5. Provide work site guidance and direction to other members of the zone maintenance team, assuring safe and orderly completion of service calls and projects. Approximate cumulative hours: 800
6. Advise supervision and/or management by recommending equipment maintenance tasks and identifying equipment needing priority attention. Approximate cumulative hours: 400
7. Communicate with building occupants and supervision regarding work, schedules, system problems, estimated completion time, effects of system problems on occupant safety and comfort. Approximate cumulative hours: 400
8. Formal training in safety procedures in accordance with OSHA regulations, including hazardous materials and work environment. Identification and proper use of safety equipment including PPE. Working in a safe manner with other trades and building occupants. Jobsite and workplace organization and cleanliness. Identification, use, care and repair of tools and specialized equipment. Reading and understanding blueprints as they pertain to building layout and all affected. Approximate cumulative hours: 400

Total hours: 8,000

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