



## **William R. Moore College of Technology** ***Student Catalog***

*Main Campus: 1200 Poplar Ave., Memphis, TN 38104-7240*

*Welding Building Extended Campus: 475 N. Bellevue Blvd, Memphis, TN 38105-4319*

*Automotive Extended Campus: 2785 S. Mendenhall Rd., Memphis, TN 38115-2271*

*Phone: 901-726-1977 Fax: 901-726-1978*

*mooretech.edu*

Non-Profit - Established 1939

*OFFERING*

### **ASSOCIATE OF APPLIED TECHNOLOGY DEGREES DIPLOMA AND CERTIFICATE PROGRAMS**

#### **"HANDS-ON LEARNING"**

- FINANCIAL AID FOR QUALIFIED APPLICANTS IN DAY PROGRAMS
- APPROVED FOR THE TRAINING OF VETERANS
- ACCREDITED BY THE COUNCIL ON OCCUPATIONAL EDUCATION
- LIFETIME FREE PLACEMENT ASSISTANCE FOR GRADUATES
- DAY AND EVENING CLASSES
- ASSOCIATE DEGREE AVAILABLE FOR FULLTIME STUDENTS

Moore Tech follows a non-discriminatory enrollment policy. Applications are accepted without regard to race, color, religion, national origin, age, disability, sexual orientation or status as a parent.

Any and all course offerings, academic requirements, and other information contained in this publication are subject to change and/or revocation without notice.

William R. Moore College of Technology is accredited by the Accrediting Commission of the Council on Occupational Education.

## Table of Contents

<b>GENERAL INFORMATION</b> .....	4
<b>Governing Body</b> .....	5
<b>Administration and Staff</b> .....	5
<b>ACADEMIC INFORMATION</b> .....	7
<b>Faculty</b> .....	7
<b>Academic Year</b> .....	9
<b>Areas of Study</b> .....	9
<b>PROGRAM SUMMARY</b> .....	10
<b>Associate of Applied Technology Degrees</b> .....	11
<b>General Education Courses</b> .....	11
<b>Transferability of Credit</b> .....	12
<b>Articulation Agreements</b> .....	12
<b>Moore Tech and Ranken Technical College Transfer Agreement</b> .....	12
<b>General Admission Requirements</b> .....	13
<b>High School Graduate or General Education Diploma (GED)</b> .....	13
<b>Dual Enrollment</b> .....	13
<b>Admission Exam</b> .....	13
<b>Drug Policy</b> .....	13
<b>Disabled Students</b> .....	14
<b>Official Enrollment - Two Week Attendance Policy</b> .....	14
<b>Admission Application Procedures</b> .....	14
<b>TUITION AND FEE INFORMATION</b> .....	15
<b>Payment Methods</b> .....	16
<b>How to Apply for Federal Pell Grants</b> .....	17
<b>Refund Policy</b> .....	17
<b>Student Complaint and Grievance Policy and Procedures</b> .....	18
<b>Academic Policies and Standards</b> .....	19
<b>Classification of Students</b> .....	19
<b>Academic Load</b> .....	19
<b>Grading System</b> .....	19
<b>Grade and Academic Progress Notification to Students</b> .....	20
<b>Minimum Grade Point Average (GPA) and Completion Rates</b> .....	20
<b>College Attendance Policy</b> .....	20
<b>Drops and Withdrawals</b> .....	21
<b>Re-Enrollment</b> .....	21
<b>Graduation Requirements</b> .....	21

Acceptance of Transfer Credit from Other Colleges .....	21
Double Majors/Stackables .....	22
<b>ACADEMIC PROGRESS STANDARDS</b> .....	22
Academic Warning/Probation .....	22
Academic Suspension .....	22
Academic Appeal .....	22
Veterans.....	23
Satisfactory Academic Progress (SAP) Policy for Title IV Financial Aid Students.....	23
Degree and Diploma Programs with Normal Time Frame and Max Time Frame .....	25
<b>RULES OF STUDENT CONDUCT</b> .....	26
Programs and Course Descriptions .....	28
Air Conditioning, Heating and Refrigeration .....	29
Air Conditioning, Heating and Refrigeration .....	31
Air Conditioning, Refrigeration and Heating .....	32
Air Conditioning, Heating and Refrigeration .....	33
Air Conditioning, Refrigeration and Heating .....	34
Automotive Service Technology .....	35
Automotive Service Technology .....	36
Automotive Service Technology .....	37
Automotive Service Technology .....	38
Industrial Electricity and Plant Maintenance .....	39
Industrial Electricity and Plant Maintenance .....	40
Industrial Electricity and Plant Maintenance .....	41
Industrial Electricity and Plant Maintenance .....	42
Industrial Electricity and Plant Maintenance .....	43
Industrial Electricity and Plant Maintenance .....	44
Machining Technology – Machine Shop.....	45
Machining Technology – Machine Shop.....	46
Machining Technology – Machine Shop.....	47
Machining Technology – Machine Shop.....	48
Machining Technology – Machine Shop.....	49
Machining Technology – Machine Shop.....	50
Plumbing Certificate – (1 Year) .....	51
Plumbing Certificate – (1 Year) .....	52
Maintenance Technology (Property Maintenance) .....	53
Maintenance Technology (Property Maintenance) .....	54
Maintenance Technology (Property Maintenance) .....	55

<b>Maintenance Technology (Property Maintenance)</b> .....	56
<b>Property Maintenance-Advanced</b> .....	57
<b>Property Maintenance-Advanced</b> .....	59
<b>Property Maintenance-Advanced</b> .....	60
<b>Property Maintenance-Advanced</b> .....	62
<b>Property Maintenance-Advanced</b> .....	63
<b>Property Maintenance-Advanced</b> .....	64
<b>Welding</b> .....	65
<b>Welding</b> .....	66
<b>Welding</b> .....	67
<b>Welding</b> .....	68
<b>Welding – Advanced</b> .....	69
<b>Welding – Advanced</b> .....	70
<b>Welding – Advanced</b> .....	71
<b>Welding – Advanced</b> .....	72
<b>Welding – Advanced</b> .....	73
<b>Welding – Advanced</b> .....	74
<b>GENERAL EDUCATION COURSE DESCRIPTIONS</b> .....	75

## GENERAL INFORMATION

### Description of the College

Moore Tech is a private, non-profit, vocational-technical training institution operated and governed by an unpaid board of trustees. Operation is entirely independent of any other college system.

The curriculum is occupationally focused and consists of one-year and two-year programs leading towards Associate of Applied Technology Degrees, Diplomas and Certificates above the high school level. Some high school students may be permitted to enroll as dual enrollment students at the college while still attending high school.

The college is located in five buildings on three campuses. The main campus is located at 1200 Poplar Avenue, Memphis, TN. The main building houses the administrative offices, lobby, faculty conference room, auditorium, student lounge, shops and classrooms. The adjacent building on the main campus is used for additional classes and shops. The main campus programs are Air Conditioning, Refrigeration and Heating, Industrial Electricity and Plant Maintenance, Maintenance Technology/Property Maintenance, Machining and Plumbing programs. The Welding Building is located ½ mile from the main campus and is located at 475 N. Bellevue Blvd., Memphis, TN. It houses the entire welding program, including workshops, classrooms and offices. The automotive campus is located at 2785 S. Mendenhall Rd., Memphis, TN and its two buildings house all of the automotive shop space, classrooms, conference areas, faculty offices, media center, and automotive related storage.

### Mission Statement

The mission of Moore Tech is to provide students with the training and skills necessary to become successful in business and industry. It is the goal of the college to provide students with a working knowledge of the skills needed to enter employment in the program area of their choice.

### Vision Statement

The vision of Moore Tech is to provide programs for adult students to improve their opportunities for career advancement and more productive careers. Our vision is realized through curricula that develops skills that can be demonstrated and measurable in the trade areas of each program and through experiences that emphasize the practical application of theoretical models and concepts incorporated in a diverse learning environment, to include using a wide range of teaching and learning methods.

### Accreditation

William R. Moore College of Technology is accredited by the Accrediting Commission of the Council on Occupational Education.



## **Governing Body**

Moore Tech is a private, non-profit vocational training institution operated and governed by an unpaid board of trustees.

## **Board of Trustees**

Ben Wingfield – Board Chair  
Belinda Anderson  
Bena Cates  
Ben Keras  
Charles Higgins  
Chris Ewing  
Dede Malmo  
Farrar Schaeffer  
James Kirkwood  
Rusty Linkous  
Tim May  
Nickey Shah  
Clay Smythe  
Tom Wack  
Willis Yates

## **Administration and Staff**

### ***Leadership***

Stanley (Skip) Redmond – President  
Jerry Johnson – Chief Financial Officer  
Andrea Baird – Chief Administrative Officer & V.P. of Student Services  
Karen Treas - V.P. of Career Services and Industry Relations  
Martin Gambill – Director, Automotive Campus  
John Schmidt – Director of Industry Training

### ***Staff***

Justin Benjamin – Director of Digital Media  
Monica Clifton – Financial Aid Counselor  
Jessica Croslow – Director of Grants & Compliance  
Debbie Dole – Academic Administrative Coordinator, Auto Campus  
Chevon Robinson – Administrative Assistant  
Mike Shaw – College Enrollment Coordinator & Education Support Specialist  
April Turner – Registrar & Retention  
Katina Williams – Admissions Registration Advisor  
Amos Mukupya – Facilities Maintenance Specialist  
Grace Thompson – Facilities Technician, Main Campus

## **Historical Development**

*"A Great Man with a Great Vision"* is the origin of Moore Tech.

William Robert Moore was a nineteenth-century Memphis entrepreneur who overcame extreme hardships as a boy to achieve extraordinary business and government success. He was born March 28, 1830, near Huntsville, Alabama. At age 12 he went to work as a farmhand. For the year he earned \$24, room and board. At the end of the year he had saved \$12.

He attended school until he was 15, but was mostly self-taught. Mr. Moore subsequently became a retail sales clerk in Nashville, then a wholesale salesman. Then he moved to New York, where he also was a salesman.

While still in his 20s, Mr. Moore returned to the south, opening a wholesale dry goods business, Wm. R. Moore, Inc., in Memphis. The business became a great success and Mr. Moore emerged as a valued civic leader in the city. He also was elected to the United States Congress. Mr. Moore always had a great interest in providing for young people the education that had eluded him as a boy.

In 1909, at the age of 79, Mr. Moore died. He left the bulk of his estate to establish a college in his name that would provide, ". . . education and training of youths in the mechanical arts and sciences, including electricity, and the operation and maintenance of a manual and scientific training institution."

A board of trustees was selected from among the most prominent leaders in Memphis. They chartered The Wm. R. Moore School of Technology to be operated in the, ". . . methods and principles observed in the best institutions." The board invested the money, and when Mrs. Moore died, she left the balance of the estate to the college. The total funds allowed the trustees to begin construction of the school in 1938. Its first class convened in January of 1939 at its present location, 1200 Poplar Avenue.

Mr. Moore's dream has continued uninterrupted. Initially no tuition was charged. Today approximately 65 percent of costs are paid from the college trust fund. The college curricula has evolved over the years to keep up with the needs of a changing job market. Moore Tech has provided important vocational training to tens of thousands of students throughout the mid-south.

## **Purpose**

Moore Tech is a private, non-profit, post-secondary college. Our objective is to teach men and women how to earn a living by providing the knowledge and skills necessary to succeed in a specific technical vocation. In all our philosophies, concepts, and functions, Moore Tech reflects the worth of the individual, while serving the needs of both the individual and industry.

The college is dedicated to provide quality programs of instruction which not only recognize the importance of technical knowledge and the development of skills, but also the need to develop quality work habits and attitudes.

We recognize the fundamental need to develop the skills and knowledge of students to fulfill the critical manpower needs of industry. The college provides intensive and practical courses designed to enable graduates to become employable upon graduation.

## ACADEMIC INFORMATION

### Faculty

Faculty members at Moore Tech have many years of on-the-job work experience and practical knowledge in the areas they teach.

#### Full-Time Faculty

Ballin, Gene

Plumbing and Property Maintenance

Bachelor of Arts, Memphis State

Benton, Dean

Air Conditioning

Assoc. of Applied Technology – Air Cond., Refrig & Heating, Moore Tech

Colby, Kyle

Industrial Electricity and Plant Maintenance

Assoc. of Applied Technology – Industrial Electricity & Plant Maintenance, Moore Tech

Frye, Paul

Automotive

Assoc. of Applied Science in Automotive Service Technology, State Technical Institute at Memphis

Gambill, Martin – Director of Automotive Campus

Assoc. of Occupational Studies (AOS), Nashville Auto-Diesel College in Auto-Diesel Repair

Haltzman, Stephen

Machining/Welding

Assoc. of Applied Technology – Machining, Moore Tech

James, William – Director of Machining Program

Machining

Assoc. of Applied Technology – Machining, Moore Tech

Johnson, Terrance

Machining

Assoc. of Applied Technology – Machining, Moore Tech

Kuebler, Josh

Automotive

Bachelors of Applied Science – Automotive Technology, Southern Illinois University

Manning, Dennis

Industrial Electricity & Plant Maintenance

Assoc. of Applied Technology – Industrial Electricity & Plant Maintenance, Moore Tech

Paige, Porter  
Welding  
Assoc. of Applied Technology – Welding-Advanced, Moore Tech

Rote, Ben  
Welding  
Bachelor of Arts – English Literature, University of Colorado

Schmidt, John – Director of Industrial Training  
Welding  
Assoc. of Applied Technology – Welding-Advanced, Moore Tech

Shaffer, Bobby  
Heating/Property Maintenance  
Assoc. of Applied Technology – Air Cond. Refrig. & Heating, Moore Tech

White, Richard  
HVAC - Heating  
Master's in Operations Management, University of Arkansas

Wilson, Mark  
Machining  
Bachelors of Architecture, University of Memphis  
Assoc. of Science - Mechanical Engineering, State Technical Institute at Memphis

Yohanek, Clayton  
Welding  
Assoc. of Applied Technology – Welding-Advanced, Moore Tech

**Adjunct Faculty**

Appling, Robert  
Industrial Electricity & Plant Maintenance

Barnette, Daniel  
Air Conditioning

Cunningham, Catherine  
Technical Writing  
Bachelor of Arts - English, University of Memphis

Cunningham, David  
Psychology, Physics, Professional Development  
Bachelor of Science – Psychology, Worcester State University

Doan, James  
Heating

Dunlap, Terry  
Math for Technicians

Friedman, Bob  
Heating

King, Aubrey  
Heating

Shaw, Mike  
Professional Development  
Bachelor of Arts - Community Development, Covenant College

Simmons, Greg  
Heating

### **Academic Year**

Moore Tech schedules classes 11 months of the year. Each college-year is divided into three (3) terms of 14 weeks each. Each term is called a trimester. There is a one month break during August. The school's current Calendar and Fee Schedule is available in the admission office and on the college website.

- **Fall Trimester** - First of September until the middle of December.
- **Winter Trimester** - First of January until the middle of April.
- **Spring Trimester** - Middle of April until the end of July.

### **Areas of Study**

Moore Tech offers Associate of Applied Technology Degrees, Diplomas, and Certificates. Students enrolling in Moore Tech may specialize in one of the following areas. All programs are available at the Main Campus with the exception of automotive classes and welding classes.

- Air Conditioning, Refrigeration and Heating (Associate of Applied Technology) 2 year
- Air Conditioning, Refrigeration and Heating (Diploma) 2 year
- Air Conditioning, Refrigeration and Heating (Certificate) 2 year
- Automotive Service Technology (Associate of Applied Technology) 2 year
- Automotive Service Technology (Diploma) 2 year
- Industrial Electricity and Plant Maintenance (Associate of Applied Technology) 2 year
- Industrial Electricity and Plant Maintenance (Diploma) 2 year
- Industrial Electricity and Plant Maintenance (Certificate) 2 year
- Machine Shop (Associate of Applied Technology) 2 year
- Machine Shop (Diploma) 2 year
- Machine Shop (Certificate) 2 year
- Plumbing (Certificate) 1 year
- Maintenance Technology/Property Maintenance (Diploma) 1 year
- Maintenance Technology/Property Maintenance (Certificate) 1 year
- Property Maintenance – Advanced (Associate of Applied Technology) 2 year
- Property Maintenance – Advanced (Diploma) 2 year
- Property Maintenance – Advanced (Certificate) 2 year
- Welding (Diploma) 1 year
- Welding (Certificate) 1 year
- Welding – Advanced (Associate of Applied Technology) 2 year
- Welding – Advanced (Diploma) 2 year
- Welding – Advanced (Certificate) 2 year

## PROGRAM SUMMARY

Here are summaries of the programs. To see more detailed information on each program and applicable course descriptions, see the Program/Course Description section of this catalog.

**Air Conditioning/Refrigeration & Heating** is available as a day, two-year, Diploma or Associate of Applied Technology Degree or a night, two-year Certificate program. Students complete courses in Electricity for HVAC, Basic Domestic Heating, Commercial Heating, Introduction to Air Conditioning and Refrigeration, Commercial Refrigeration and Air Conditioning. Day students are also required to take six technical electives.

**Automotive Service Technology** is available as a day or night, two-year, Associate of Applied Technology Degree or Diploma program. Students complete courses that cover all eight A.S.E. certification areas, and all aspects of light-duty automotive service as related to professional repair facilities (new-car dealer) needs. This program does not cover any body or paint work. The last core class of the program is a full-time (40 hours/week) internship at a new-car dealership. This will require a valid driver's license, pass a drug test, and other dealer specific requirements. When applying for this program, please use the Admission Application for the Automotive Service Technology Program. The Automotive Service Technology program is only available at our Automotive Campus located at 2785 S. Mendenhall Rd., Memphis, TN 38115.

**Industrial Electricity & Plant Maintenance** is available as a day, two-year Diploma or Associate of Applied Technology Degree program or a night, two-year Certificate program. Students complete courses in Intro to PLC's, Industrial Fluid Power, Electric Motor Control and additional courses in commercial wiring and National Electric Code. Day students also are required to take six technical electives.

**Machine Shop (Machining)** is available as a day, two-year Diploma or Associate of Applied Technology Degree program or a night, two-year Certificate program. Students spend a year on manual machines and an additional year on CNC (computer numerical control) machines. They will complete courses in Basic Machining Technology, Machining Metals, CNC Lathe & Milling, Precision Medical Machining and Machine Shop Practice. Day students are also required to take six technical electives.

**Maintenance Technology (Property Maintenance)** is available as a day, one-year Diploma program, a day, two-year Diploma program, a day two-year Associate of Applied Technology Degree, a night, one-year Certificate program or a night, two-year Certificate program. The two year program options are called Property Maintenance – Advanced. One-year students complete courses in Electricity, Carpentry and Plumbing. Two-year students also take Advanced Carpentry, Basic Domestic Heating and Introduction to Air Conditioning and Refrigeration. For students who have already completed HVAC courses, Welding and Advanced Electricity may be substituted for HVAC courses. Day students are also required to take six technical electives.

**Plumbing** is a one-year certificate program that consist of three courses taught at night. Students complete PM113-C Property Maintenance Plumbing Repair, PM114-C Commercial Plumbing Fixtures, Water Heating Systems and Fuel Gas Applications and PM115-C Drain, Waste, Vent, Potable Water Distribution, Materials & Design.

**Welding** is available as a day, one-year Diploma program, a day, two-year Diploma program, a day, two-year Associate of Applied Technology Degree, a night, one-year Certificate program or a night, two-year Certificate program. The two-year program options are called *Welding – Advanced*. One-year welding students take introductory, intermediate and advanced welding. Two-year students will also be trained in Advanced Pipe Welding, CNC Plasma Cutting and Robotic Welding. Day students are also required to take six technical electives. All welding related classes are taught at our Welding Building located 475 N. Bellevue Blvd (½ mile from our Main Campus.)

### **Associate of Applied Technology Degrees**

In addition to diploma and certificate programs, Moore Tech offers Associate of Applied Technology Degrees to day students (and both day and night students in Automotive Service Technology) enrolled in one of the following program areas:

- **Air Conditioning, Refrigeration & Heating**
- **Automotive Service Technology**
- **Industrial Electricity and Plant Maintenance**
- **Machine Shop (Machining)**
- **Property Maintenance – Advanced**
- **Welding - Advanced**

The primary objective of the Associate of Applied Technology Degree is to improve employment opportunities. In addition to 72 credit hours of technical courses, students enrolled in Associate of Applied Technology Degree programs take an additional 15 credit hours in general education courses for a total of 87 credit hours. Students take a 3 credit hour general education class one hour a day, Monday through Thursday for five trimesters.

### **General Education Courses**

One general education course is offered each trimester. Each course is for three credit-hours.

<b>Professional Development</b>	<b>GE-102</b>	<b>3 credit hours</b>
<b>Technical Writing</b>	<b>GE-103</b>	<b>3 credit hours</b>
<b>Technical Physics</b>	<b>GE-104</b>	<b>3 credit hours</b>
<b>Math for Technicians</b>	<b>GE-105</b>	<b>3 credit hours</b>
<b>Psychology</b>	<b>GE-106</b>	<b>3 credit hours</b>
<b>Intro to Computer Science</b>	<b>GE-107</b>	<b>3 credit hours</b>

Courses taken at other accredited colleges may be transferable to Moore Tech toward meeting a student's degree requirements. It is the responsibility of the student to have these official transcripts sent for review. If a course from another college is considered sufficient to fulfill a general education class requirement, the student will not be required to take the applicable general education course for that trimester. General Education courses include the disciplines of humanities, behavioral science, natural or applied science, and math. A student must complete at least one course from each of these four basic areas. General education course titles and subjects may change, however, the courses offered will remain consistent with the classifications and guidelines required for accreditation.

## **Transferability of Credit**

Moore Tech is accredited by the Council on Occupational Education. Our programs are designed for students to graduate and seek employment. The acceptance of our credit by other colleges is the decision of the college for which you wish to transfer.

### **Articulation Agreements**

#### **Moore Tech and Ranken Technical College Transfer Agreement (Bachelors of Applied Science and Applied Management Degree)**

Moore Tech and Rankin Technical College have a memorandum of understanding concerning the transferability of credit from Moore Tech toward Rankin Technical College's Bachelors of Applied Science and Applied Management Degree. Ranken Technical College in St. Louis, Missouri may accept transferable credits earned with a grade of "C" or higher from Moore Tech's technical degree programs towards their Bachelors of Science and Applied Management degree program. Rankin's program is offered as an online program that works out perfectly for student's living in Memphis area. A copy of the Memorandum of Understanding between Moore Tech and Rankin College is available in the admission office and on the college website. It is up to other colleges and their accrediting agencies whether they will or will not accept credits from Moore Tech. Students interested in transferring to other colleges should contact the other colleges prior to enrolling at Moore Tech.

#### **University of Arkansas at Fort Smith Articulation Agreement**

Moore Tech and the University of Arkansas at Fort Smith (UAFS) have a memorandum of understanding concerning the transferability of credit from Moore Tech toward University of Arkansas Fort Smith's Bachelors of Applied Technology Degree. Check with the Moore Tech Office of Admissions for full details.

#### **University of Arkansas at Mid-South**

Moore Tech and the University of Arkansas at Mid-South have arranged for certain training in the area of machining and welding from Moore Tech as documented by industry certifications to be used as credit toward their welding and machining programs. Check with the Moore Tech Office of Admissions for full details.

## **General Admission Requirements**

### **High School Graduate or General Education Diploma (GED)**

All applicants to the college must be at least 18 years of age and be a high school graduate or have a General Education Diploma (GED). High school graduates must have a Regular High School Diploma (Not Special Diploma) that comes from an accredited organization recognized by the U.S. Department of Education. Home School graduates must provide transcripts that meet the homeschooling guidelines of their state. High School Transcripts from other countries must be evaluated to confirm that they are equivalent to a U.S. High School Diploma. There are several transcript evaluation services available. Moore Tech also reserves the right to require additional study in English language in those cases where a candidate's proficiency falls below minimum standards. Some individual programs may have additional admission requirements.

### **Dual Enrollment**

High school students may enroll in classes to fulfill high school elective credits while simultaneously working toward a degree, diploma or certificate from Moore Tech. The requirement of a high school diploma is waived for dual enrollment students. Dual Enrollment students do however need to have their H.S. Transcript forwarded to admissions. Dual enrollment requirements may vary by year and are subject to approval by the student's school system and school, professional school counselor, parent(s), and the Moore Tech admission office.

Because of an experimental program with the Department of Education, some Dual Enrollment students at Moore Tech from local public high schools may qualify for Federal Pell Grant if they are eligible. Otherwise students are expected to pay tuition at the beginning of each trimester.

### **Admission Exam**

Students enrolling in a Diploma or Associate of Applied Technology Degree programs must pass an admission exam if they did not receive at least an 18 composite score and 18 math score on their ACT. The exam last about an hour and is usually offered once per week. There is no fee to take the exam. Students can retake the exam if they are unsuccessful. Students enrolling in night time certificate programs are not required to take the admission exam.

### **Drug Policy**

Moore Tech is a drug-free campus. Day students are subject to random drug testing. The college may perform drug testing on any student 1) randomly, 2) if a student displays "reasonable belief" behavior, or 3) a student is involved in an accident that results or could result in the filing of an insurance claim. A Drug Testing Statement is included in the admission application. Moore Tech strives to train people to have successful and financially rewarding careers. Almost all companies hiring our graduates require drug tests. Students should strive to be the best student and employee that they can be by working hard and avoiding substances that can limit their success.

## **Disabled Students**

The hands-on programs at Moore Tech require physical abilities, endurance, mobility, dexterity, etc. that allows students to perform successfully in the programs and in the work place. *No services are provided for disabled students.* This should be taken into consideration prior to selecting a career and applying for enrollment.

## **Official Enrollment - Two Week Attendance Policy**

Students will be considered officially enrolled once the student attends beyond the first two weeks (14 calendar days) from the official start date of the trimester. Classes dropped during the first two weeks will not appear on the transcript.

## **Admission Application Procedures**

Students applying for enrollment must submit a complete admission application form as soon as possible before the beginning of the term in which they wish to enroll. Applicants who are high school graduates should have their high school send a certified transcript to the Moore Tech admissions office.

Students are admitted only at the beginning of each new term. Applications are taken for the next term on the calendar at any time prior to the first day of the term. The admission application must be turned into the Office of Admissions along with the \$80 registration fee. Students who are required to pass the admission test should wait to pay the registration fee until after they have passed the admission test.

Students enrolling in Associate of Applied Science Degree Programs or Diploma programs offered during the day must have their official transcripts sent from their high school and post-secondary institutions (if applicable). Night students must provide proof of high school graduation in the form of a photocopy of their diploma or GED or high school transcripts.

1. Students enrolling in Associate of Applied Science Degree Programs or Diploma Programs will be required to take an admissions exam if they did not receive at least an 18 composite score and 18 math score on their ACT. For additional information on the exam, please see the admissions office.
2. Background checks will be performed on all students. The college reserves the right to reject applications for admission. A felony on a student's record will not necessarily bar him or her from admission.
3. Students enrolling in Associate of Applied Science Degree Programs or Diploma programs who wish to apply for federal financial aid (Pell Grant) should complete the Financial Aid Application provided on the internet at [Federal Financial Aid Application](#). See the section on "How to Apply for Federal Pell Grants. For specific questions, please contact our Financial Aid Counselor. Moore Tech does not participate in any Title IV student loan programs.

**Applications and more information can be found on our website, [www.mooretech.edu](http://www.mooretech.edu)**

Moore Tech - Admissions Office  
1200 Poplar Avenue  
Memphis, Tennessee 38104-7240  
Phone: 901-726-1977  
[www.mooretech.edu](http://www.mooretech.edu)

## TUITION AND FEE INFORMATION

### Registration Fee

Students must pay an \$80 registration fee at the start of each trimester. A student may not be considered officially enrolled in a class or program until the registration fee is paid. Payment of the fee ensures a student's spot in class. Students receiving employer reimbursement, vocational rehabilitation, or VA benefits still need to pay the \$80 registration fee in order to enroll. This may be refunded to the student later in the trimester when additional benefits are disbursed.

### Tuition and Fees

All tuition and fees are due and payable on the first day of classes. Please see the [current Fee Schedule and Calendar](#) for registration and tuition information available in the admission office and on the college website. Those seeking payment arrangements may do so at the discretion of the admission office.

### Textbooks

The use of textbooks are included in tuition. Students are required to return textbooks prior to the taking their final exam or upon dropping a course. Lab manuals or textbooks that require the student to fill in the blank are not required to be returned. By providing the student use of textbooks for use, this allows students to reduce their cost. If students wish to own their textbooks, students always have the right to purchase their books from third party textbook providers.

### Additional Fees

Some courses may have additional lab fees or other charges depending on the programs. Currently, programs requiring additional fees include Welding, Machine Shop and the Associate of Applied Technology Degree. Please see the current [Fee Schedule and Calendar](#) for registration and tuition information. Tuition and fees are subject to change.

## Payment Methods

Moore Tech's admissions staff is available to help students with available grants, scholarships, and other funding sources that may be available to help with tuition costs. Methods of payment below are subject to change. Additional questions about these methods should be directed to the admissions office. You can make a payment online by visiting [Payment online](#).

1. **Title IV Federal Pell Grants:** Federal Pell Grants may be available to students enrolled in eligible day diploma or associate degree programs if the student qualifies. Night certificate programs do not qualify for Pell Grants. Students must apply for Pell Grants and submit any requested documents to determine if they qualify and the amount of their award. See the section How to Apply for Federal Pell Grants.
2. **Tennessee (TSAC) Grants:** Tennessee residents should apply for the Pell Grant as soon as possible and list William R Moore College as their college of choice. By applying for Pell Grants early and listing us as their Tennessee College, they are automatically applying for the Tennessee Grant.
3. **Tennessee Promise:** Tennessee Promise students must comply with all requirements prior to being eligible for Tennessee Promise funding. Perspective students should meet with their High School Counselor as soon as their junior year in High School to ensure eligibility of Tennessee Promise funds. Students utilizing their Tennessee Promise funds understand they must be enrolled in an Associate Degree program with William R. Moore College.
4. **Student Loans:** Moore Tech does not participate in any loan programs.
5. **Scholarships:** Moore Tech may know of scholarship opportunities. To inquire if scholarships are available, please see the admissions office. Additional outside scholarships may be available as well. An admissions counselor will assist you.
6. **Employer Reimbursement:** In some cases, students' employers will either pay a student's tuition or reimburse a student once a trimester is completed. To inquire if your employer offers this benefit, consult your company's Human Resources Department. Those whose employers are paying their tuition must submit a signed letter from their employer stating that the employer will pay. Those seeking reimbursement from an employer may request a transcript of completion from the front office.
7. **Vocational Rehabilitation:** Students receiving vocational rehabilitation should consult the front office. All forms must be submitted with their applications.
8. **Veterans:** Veterans seeking to utilize their veteran educational benefits to pay tuition must submit enroll in an approved program, meet all admission requirements, and provide a copy of their DD214 to the office with their admission application. They also need to submit the online VA-22-1990 FORM and submit a Paper Copy of the VA-22-1990 FORM to our Office of Admissions. Ask admissions if you have questions. Veterans enrolling in Diploma/Degree programs should also apply for Pell Grants.
9. **Additional Government Programs:** Often, there are additional programs to assist students who have elected to take a vocational or career path. Please see the front office for available opportunities.
10. **Payment Plans/Out-of-Pocket:** Tuition and fees are due at the beginning of each trimester. It is the student's responsibility to pay for tuition and fees not covered by scholarships and grants. Students should pay their full tuition balance the first day of classes. If necessary, students may ask to pay half their trimester tuition and fees the first day of class with the remainder due no later than the middle of the trimester (roughly 7 weeks into the trimester). Any additional installment plan must be agreed upon by the

college and will be put in writing. Students who fail to pay tuition at the beginning of the trimester, fail to make payments on their payment arrangements, or fail to pay their balance from a previous trimester may not be allowed to enroll. Because classes are scheduled in sequence, missing a trimester may negatively affect the student's expected graduation date by more than one term. If a student graduates owing money, the student's degree, diploma, certificate, and transcripts will be withheld until the student pays. Payment arrangements are at the discretion of the Moore Tech.

### **How to Apply for Federal Pell Grants**

Students who want to apply for federal Pell Grant (not loan) must fill out the Free Application for Student Aid (FAFSA) before being admitted to the college. Enter <http://fafsa.ed.gov> in the address bar of your browser to apply. To avoid bogus websites, do not enter it in the search engine. The FAFSA school code for Moore Tech (The William R. Moore College) is 013531 - you will need this code to complete the form.

In some cases, the college may request additional information to process your FAFSA. These materials may include your, your spouse's and/or your parents' tax return(s) transcripts, verification worksheets, low-income forms or proof of selective service. All information will remain confidential. It is the right of the college to request these materials, if needed.

The FAFSA is always free. If a site requests payment, it is not the official government site. To insure a faster processing of your financial aid, you should always try to use the IRS Data Retrieval Tool on the FAFSA application. You will need your (and your parents', if applicable) tax returns from the prior year as indicated on the FAFSA instructions. Failure to complete the FAFSA completely and accurately may delay the determination and/or awarding of Pell Grant funds. A FAFSA may be signed electronically (recommended) or downloaded and signed by hand. To sign electronically, you will need an FSA ID, which you can obtain at [fsaid.ed.gov](https://fsaid.ed.gov). If you are a dependent, your parent must also sign your FAFSA with an FSA ID. If you require assistance in filling out the FAFSA, consult the admissions office.

### **Refund Policy**

- A. An applicant may cancel enrollment at any time before the first day of classes and receive a 100% refund of all registration fees and tuition paid.
  - 1. All money paid by applicants for the term will be refunded within five working days if requested prior to the first day of the term.
  - 2. Applicants requesting cancellation after the first day of the term shall be entitled to a refund in accordance with the tuition refund schedule set forth in Section C below. Registration fees are non-refundable if not requested prior to the first day of class.
  - 3. All tuition paid will be refunded if a day student has attended 14 calendar days or less from the official start date of the trimester.
- B. A student's enrollment termination will occur not later than 14 calendar days of consecutive absences.
- C. Refunds will be based on the last day of attendance.

Tuition refunds will be calculated using the following formula:

- a. 100% refund if withdrawn prior to the first day of class.
- b. 90% refund if 10% or less of the term is completed.
- c. 50% refund if 25% or less of the term is completed.
- d. 25% refund if 50% or less of the term is completed.
- e. No refund after 50% of term is completed.

**STUDENTS RECEIVING TITLE IV PELL WHO WITHDRAW OR ARE DROPPED DURING THE TERM MAY OWE A REPAYMENT OF TITLE IV FUNDS TO PELL AND MAY OWE A REPAYMENT OF TUITION TO THE COLLEGE.**

Students receiving Title IV Pell financial aid and who withdraw or are dropped are subject to owing a repayment to Title IV Pell. Policies regarding the calculation of Title IV funds to be repaid by students to Title IV Pell grant program are subject to change and are based on the most current Title IV Pell grant repayment procedures.

Students receiving Title IV Pell funds who withdraw or are dropped during a term may also owe repayment on tuition to the college depending on the number of days the student attended prior to leaving the college.

**Student Complaint and Grievance Policy and Procedures**

The administrative office of the college maintains an open door policy which allows a student the opportunity to voice concerns or make complaints to any faculty or staff member. Most classroom complaints should be first addressed with the instructor. Students with financial aid complaints or concerns should seek counsel with the Financial Aid Counselor. Students with complaints or concerns concerning their student account should seek council with staff in the front office. If the complaint remains unresolved, the student should meet with the Chief Administrative Officer (CAO). Issues not addressed by the CAO can be addressed to the President. Any remaining issue that has not been addressed satisfactorily should be submitted to the President in writing. The President will be happy to meet with the student.

Student concerns, complaints, or suggestions should be made in the following manner. Students should first write to:

President, Moore Tech  
1200 Poplar Avenue  
Memphis, Tennessee 38104-7240  
Telephone (901) 726-1977

Accreditation of this institution is granted by the Council on Occupational Education. For any grievance that cannot be resolved by other personnel, the accrediting commission may be contacted.

Council on Occupational Education  
41 Perimeter Center East, NE, Suite 640  
Atlanta, GA 30346  
Telephone (770) 396-3898

## Academic Policies and Standards

### Classification of Students

Regular Student - A student who is enrolled in a degree, diploma, or certificate program.

Transfer Student - A student who has received credits for courses completed at other accredited institutions.

Special Non-Degree Student - A student who is not a candidate for a degree, diploma or certificate. Credit is granted for all courses successfully completed but may not be used for certificate or diploma requirements unless and until Regular Student status is granted. This includes dual enrollment students. Admission of Special Students into a particular department will be dependent on that department's class load.

Dual Enrolled Student – A high school student who is enrolled a Moore Tech to fulfill high school elective credits while simultaneously working toward a degree, diploma or certificate from Moore Tech. The requirement of a high school diploma is waived for dual enrollment students.

Foreign Student - A student coming from a foreign country. Foreign students who have a High School Diploma from another country must provide proof that their transcript is equivalent to a High School transcript accepted by the Department of Education. There are transcript evaluation services available to analyze foreign transcripts. Foreign Students can also provide a GED in place of a High School Transcript. Moore Tech also reserves the right to require additional study in the English language in those cases where a candidate's proficiency falls below minimum standards.

### Academic Load

Full-Time Student - A full-time student is one who is enrolled in a minimum of 12 credit hours per trimester.

Three-Quarter Time Student- A three-quarter time student is enrolled in 9-11 credit hours per trimester.

Half-Time Student - A half-time student is one who is enrolled in 6-8 credit hours per trimester.

Less Than Half-Time Student – A less than half-time student is one that takes 5 or less credit hours per trimester. Our night certificate students usually fall into this category.

### Grading System

91-100	A	Excellent – Assignments are performed with minimum of errors.
81-90	B	Good – Some errors are present; however, student exhibited a satisfactory understanding of the assignments.
70-80	C	Average – Assignments performed need to show improvement. Additional study is recommended.

65-69	D	Below Average – Extensive improvement is needed.
Below 65	F	Failing – Unsatisfactory*
	I	Incomplete – This grade is used in rare occasions for situations that may arise. Instructors determine if an “I” grade is warranted. This grade becomes an “F” if work is not completed within two weeks during the next trimester. It is the student’s responsibility to make arrangements with the instructor to make up work. “I” grades account as hours attempted but not earned.
	W	Withdrawal – This grade is assigned when the student withdraws from a class or is administratively withdrawn from a class after the 100% tuition refund period during the first two weeks of the trimester. It does not affect the student’s GPA. It counts as hours attempted but not earned when calculating the student’s Completion Rate.

\* In the event that the student repeats a course, the student will benefit from the higher of the two grades.

### **Grade Point Average Calculation (GPA)**

**A – 4.0**

**B – 3.0**

**C – 2.0**

**D – 1.0**

**F - 0**

Cumulative GPA’s are weighted by the number of credit hours.

### **Grade and Academic Progress Notification to Students**

Instructors issue their numeric and letter grade to students at the end of the term. During the term, students are encouraged to communicate with the instructors if they have questions concerning their course performance. Academic Warning, Probation, or Suspension notices are mailed to the student’s last known address.

### **Minimum Grade Point Average (GPA) and Completion Rates**

Students are expected to successfully complete all of their classes and maintain a minimum 2.0 GPA. The normal time length of each program is outlined in this catalog. The maximum time frame in which students will be allowed to complete a program will be 150% the normal time.

### **College Attendance Policy**

Students are expected to attend each time a class meets and be on time for class. Regular class attendance is indicative of a strong work ethic and willingness to learn. Students who graduate from Moore Tech will be expected to perform well on the job. Students with good attendance, grades, and skills may benefit from better job offers when they graduate. Students with poor attendance miss out on safety training, skill development and information they need to be a successful student and a productive employee. Students need to remember that they are not

here just to pass another class, but are here to learn the skills they need to improve their livelihood and quality of life. Students must also make school a priority in their work/life balance. The instructor determines the extent to which absences and/or tardiness affect the student grade.

### **Drops and Withdrawals**

Students should notify the college if they wish to drop a class or withdraw from the college. Students who drop a class or withdraw from the college within the first two weeks (14 calendar days) from the start of the trimester will not have their classes appear on the transcripts.

Students who stop attending class(es) will be dropped from classes if they are consecutively absent for two weeks (14 calendar days). For drops and withdrawals, the student's last date of attendance is considered the drop/withdrawal date. Drops and Withdrawals negatively affect the student's completion rate, the time of completion and academic standing. Students receiving Title IV Pell financial aid who withdraw may be required to repay Title IV Pell funds and may owe a repayment of tuition to the college. Any student anticipating dropping a class should check with the academic advisor and the financial aid counselor. Students who withdraw from the college will need to reapply to the college. Students who show poor effort, poor grades, or poor attendance may not be allowed to reenroll.

### **Re-Enrollment**

Students who withdraw from the college for any reason and then re-apply for admission are subject to review by the president of the college. Students may not be able to reenroll.

### **Graduation Requirements**

In order for a student to graduate from a program, a student must meet all of the admission and college graduation requirements for their program. Students must successfully complete all of the required courses for their program and have a minimum of a "C" 2.0 grade point average. Maximum time allowed to complete any program is 150% of the program length. Graduates are expected to have their tuition balances paid in full. Diplomas and student transcripts will be withheld if a student has an outstanding balance. Students who complete their graduation requirements and do not have an outstanding balance are issued their applicable Associate of Applied Technology Degree, Diploma, or Certificate during the graduation ceremony. Awards are also posted on student transcripts after they have completed their graduation requirement.

### **Acceptance of Transfer Credit from Other Colleges**

Moore Tech may accept credit for courses completed at other accredited institutions. Such courses must meet the following criteria in order to be awarded credit.

1. The student must have obtained a minimum grade of C (or its equivalent).
2. The course must fulfill a catalog requirement (or its equivalent).
3. Courses will be evaluated individually only after Moore Tech has received an official transcript and verified accreditation of the issuing institution.
4. Determination of credit will be based on the relevancy to the student's program at Moore Tech.
5. One year of "residency" must be completed at Moore Tech to be awarded a degree or diploma with the exception of one year diploma programs which require only two trimesters of residency.

### **Double Majors/Stackables**

Many majors require electives to be taken in technical areas outside their specific major. When a student completes all the technical electives required of a specific major, (for example a student majoring in Welding also completed all of the required courses for Machining), in addition to receiving an award in their major, Moore Tech will award a stackable certificate of completion acknowledging the number of hours completed in the secondary concentration. Stackables are only awarded after the student completes the requirements for their major. Double Majors are only awarded when courses are not shared with their primary award.

### **ACADEMIC PROGRESS STANDARDS**

Students should always have good attendance and successfully complete their attempted classes with the highest grade possible. Students are measured on both Cumulative Grade Point Average (CGPA) and Completion Rate.

The trimester credit programs are normally taught over 3-6 trimesters, depending on the program. The maximum time frame will vary depending on the enrollment status of the student each trimester.

The student must complete each program within 150% of the normal time frame. To remain in Good Academic Standing, at the end of each trimester, the student must be on pace to successfully complete 67% of the cumulative credits attempted with a minimum "C" 2.0 cumulative grade point average (CGPA).

At the end of **first trimester**, student must have a minimum 1.0 CGPA and a 50% Cumulative Completion Rate.

At the end of the **second trimester**, student must have a minimum 1.5 CGPA and a 50% Cumulative Completion Rate.

At the end of the **all other trimesters**, student must have a minimum of 2.0 CGPA and a 67% Cumulative Completion Rate.

Cumulative GPA and Cumulative Completion Rate is Calculated at the End of Each Trimester

### **Academic Warning/Probation**

Students who do not meet the above academic standards will be placed on Academic Warning/Academic Probation.

### **Academic Suspension**

Students who do not meet the minimum CGPA requirements or the minimum Cumulative Completion Rate Requirements the following trimester are placed on Academic Suspension.

### **Academic Appeal**

Students placed on Academic Suspension have already been given a chance to bring their academic performance up. Students may file a written appeal. The appeal must explain how the student has made progress and what circumstances has changed that would allow the student to be successful if given an additional opportunity. Past attendance, effort, and performance will be considered in any appeal process. The Appeal decision is final. Students who have their appeal approved but fall again below the minimum 2.0 GPA or the minimum 67% Completion Rate will not be allowed to reenroll.

## **Veterans**

Veterans are reminded that unsatisfactory progress, academic or non-academic, may result in a cancellation or withholding of benefits by the U.S. Department of Veterans Affairs.

## **Satisfactory Academic Progress (SAP) Policy for Title IV Financial Aid Students**

The trimester credit programs are normally taught over 3-6 trimesters, depending on the program. The maximum time frame will vary depending on the enrollment status of the student each trimester.

Satisfactory Academic Progress (SAP) requires the student to complete the program within 150% of the normal time frame. At the end of each trimester, the student must be on pace to successfully complete 67% of the cumulative credits attempted with a minimum "C" 2.0 cumulative grade point average (CGPA).

**At the end of first trimester, student must have a minimum 1.0 CGPA and a 50% Cumulative Completion Rate.**

**At the end of the second trimester, student must have a minimum 1.5 CGPA and a 50% Cumulative Completion Rate.**

**At the end of the all other trimesters, student must have a minimum of 2.0 CGPA and a 67% Cumulative Completion Rate.**

## **Cumulative GPA and Cumulative Completion Rate is Calculated at the End of Each Trimester**

The number of total cumulative credit hours passed divided by the total cumulative number of credit hours attempted = Completion Rate.

A passing grade would include an (A, B, C, or D). I-Incomplete grades are not considered passing and will convert to F's if not completed or made up within 2 weeks into the next trimester. W-Withdrawal grades are not considered passing and will effect student's completion rate but will not be calculated in the students' CGPA.

**Withdrawals/Drops** - If the student withdraws from a course after the add/drop period, the credits in the course will be included as credits attempted but it will not affect the CGPA.

**Classes When No Financial Aid Received** - Classes taken when no financial aid was received are still counted toward CGPA and completion rate.

**Transfer credits** will count both as attempted and completed credits but will not affect the CGPA unless the credits are transferred from another program at the school.

**Change of Major** If a student changes majors, SAP will be based on coursework (including attempted electives) if the coursework would apply to the new program. Thus the SAP criteria will be reset. For SAP purposes, change of majors are limited to two SAP resets.

**Repeated failed subjects** will count as attempted credits but only the most recent grade will count toward the CGPA.

**Non Credit remedial** classes are not eligible for financial aid.

**Incomplete grades** will be changed to an F if the required class work is not completed within 2 weeks of the next trimester. If student has I grade, their financial aid may be put on hold until the “I” is completed. Once an “I” grade has been finalized, SAP will be reevaluated.

**Financial Aid Warning** -If the student fails to meet the above requirement at the end of the trimester, the student will be placed on Academic Warning for the next trimester. If the student is not in SAP at the end of the Academic Warning trimester, the student will be placed on Unsatisfactory Academic Progress (USAP) and all financial aid will be terminated.

**Appeal Process of an Unsatisfactory Academic Progress (USAP) Status** - If a student is placed on Unsatisfactory Academic Progress after they have been placed on Academic Warning, all of the student’s financial aid is terminated. Students on USAP may appeal their loss of financial aid based on unusual circumstances, such as death in the family or illness by giving written notice to the FAA within 10 college business days after receiving the notice. The written notice must explain what prevented the student from maintaining SAP and what has changed in the student’s situation that will allow the student to regain their Satisfactory Academic Progress. The FAA will resolve the appeal within 10 college business days and notify the student of the decision. The decision is final. *College business days do not include college break periods.* If the student’s appeal is approved based on student’s situation that has changed that will allow them to regain Satisfactory Academic Progress, the student will be placed on Financial Aid Probation and the student’s eligibility for Pell grant will be reviewed by the FAA and if eligible, Financial Aid funding will be continued.

**Financial Aid Probation** - The student is eligible for Financial Aid Probation for one semester only after a successful appeal. If it appears that it may take two trimesters for the student to be back in SAP, the student would have to have a customized plan outlining the goals over both trimesters. If a two trimester plan is not used, the student would have to meet SAP requirements at the end of the 1<sup>st</sup> trimester of Financial Aid Probation or their financial aid will be terminated. If a student is on a two trimester Academic Plan, at the end of the 1<sup>st</sup> trimester of Academic Probation, the student would have to meet SAP requirements or meet the academic plan goals of the 1<sup>st</sup> trimester or aid would be terminated. If student on an academic plan meets the 1<sup>st</sup> trimester plan goals, they can continue to receive aid for the 2<sup>nd</sup> trimester of Academic Probation. If a student on an Academic Plan fails to meet SAP at the end of their Academic Plan’s 2<sup>nd</sup> trimester, their financial aid funding will be terminated without any additional appeal options.

**Reinstatement of Aid** – After appeal processes, etc. a student who has lost financial aid because of their Unsatisfactory Academic Progress status must pay their own tuition and fees. Once the student has successfully completed 67% of the credits attempted, within the required timeframe, and with a 2.0 CGPA, if eligible, financial aid will be reinstated for future payments and the student will be placed back into SAP Status.

**Reenrollment of USAP Student** - If a student on USAP withdraws from the college, they are still considered on USAP if they reenroll in the college and they must complete the required SAP policy requirements to become eligible for financial aid if applicable.

## Degree and Diploma Programs with Normal Time Frame and Max Time Frame

<b>Program</b>	<b>Normal Time Frame</b>	<b>Maximum Time Frame</b>
Air Cond Refrig & Heating AAT	87 credits	130 credits
Air Cond Refrig & Heating Diploma	72 credits	108 credits
Automotive Service Technology AAT	87 credits	130 credits
Automotive Service Technology Diploma	72 credits	108 credits
Indust. Elect. & Plant Maint. AAT	87 credits	130 credits
Indust. Elect. & Plant Maint. Diploma	72 credits	108 credits
Machine Shop AAT	87 credits	130 credits
Machine Shop Diploma	72 credits	108 credits
Maintenance Tech Diploma	36 credits	54 credits
Property Maintenance-Advanced AAT	87 credits	130 credits
Property Maintenance-Advanced Diploma	72 credits	108 credits
Welding Diploma	36 credits	54 credits
Welding-Advanced AAT	87 credits	130 credits
Welding-Advanced Diploma	72 credits	108 credits

## **RULES OF STUDENT CONDUCT**

One of the objectives of education is to develop self-reliance and to form desirable habits of conduct. Students are expected to conform to the ordinary rules of polite society, to be truthful, to respect the rights of others, to attend classes without being a disturbance to others and to have regard for the preservation of college property as well as the private property of others.

**VANDALISM:** Destroying, damaging, or defacing college or private property.

**WEAPONS:** Possession of, or association with, knives, firearms or explosives on campus.

\*See expanded definition of weapons below.

**GAMBLING:** Gambling of any form.

**ALCOHOL and OTHER DRUGS:** Possession, consumption, or being under the influence of alcoholic beverages, narcotics, barbiturates, amphetamines, etc. on campus. This applies to approved on-campus social functions and those acting as college representatives off campus. See Alcohol and Other Drug Abuse Prevention Program for details on AOD prevention and Moore Tech's Drug Testing Policy.

**FINANCIAL IRREGULARITIES:** Writing bad checks or failure to pay college fees.

**DISTURBING THE PEACE:** Any behavior which in any way impairs the ability of the college to operate in a peaceful environment and/or provide an environment conducive to learning. Radio volume from vehicles should be such that it can only be heard from inside the vehicle. It is important that we not disturb our neighbors that live adjacent to our campus.

**RIOTOUS CONDUCT:** Participation in riotous conduct, individually or in groups. This includes hate statements involving race or any harassment regarding race.

**APPROPRIATE ATTIRE:** Students are required to wear clothing that is not only suitable and safe for working in shops but would be acceptable in the work environment. This would include but is not limited to; no off the waist pants, no suggestive "gang" apparel, no crude or vulgar t-shirts, etc.

**TRAFFIC:** Repeated violations of parking, speeding, and driving regulations on campus.

**SMOKING:** Smoking is NOT permitted in any building on our campus

**SEXUAL MISCONDUCT:** Sexual assault, sexual violence or sexual harassment. Sexual harassment includes unwelcome sexual advances, requests for sexual favors, and other verbal, nonverbal, or physical conduct of a physical nature. This includes violence against women as it relates to domestic assault, dating violence, and stalking.

**THREATENING** the safety or well-being of a student, faculty, or staff.

**FELONY CRIME:** Commission of any felony during enrollment.

Any violations or complaints concerning these issues or other issues should be reported immediately to the Chief Administrative Officer or their designee. Complaint and Grievance procedures are on page 4 of the College Catalog which is also available on the College's Web.

\*Weapons are defined as guns, knives and other objects universally considered a weapon by the police. A "weapon" can also be any object, which would do harm to another when used as such. The College shall deem any such object a "weapon" for the purpose of enforcing of this policy.

### **Non-Academic Probation/Suspension/Expulsion**

Non-academic probation, suspension, or expulsion may be imposed for violation of college rules or misconduct. The college may suspend or expel any student whose conduct disrupts class, poses a safety hazard or in any way violates college policies, local, state, or federal laws.

### **Non-Academic Probation/Suspension/Expulsion Appeal**

A student who has been put on probation, suspended or expelled may appeal the decision to the President of the college. A Student who has been suspended or expelled may be re-admitted only once. A re-admitted student will be placed on probation for the remainder of enrollment. Approval of an appeal or conditions of the probation will be determined by the president in consultation with administrative staff and faculty.

### **Requesting Transcripts from Moore Tech**

Copies of the transcript of a student's academic record are issued only at the request of the student or authorized agent. No transcript will be provided for any student who owes the college a financial debt.

Moore Tech adheres to the Family Education Rights and Privacy Act (FERPA) and no unauthorized disclosure of information pertaining to academic or financial records will be allowed. A complete policy statement on FERPA is available upon request.

Transcripts will be forwarded to the proper institutions or organizations upon request of the student. (The acceptance of credit units by other institutions will be dependent on the policies of that institution.)

### **Job Placement**

Free placement service is available to all graduates and is coordinated through our placement and administrative staff. After completion of program requirements, job interviews can be scheduled, and assistance with job applications, resumes, etc. can be provided when requested. Job placement is a lifetime service and available to anyone throughout his or her career who has graduated from the college.

### **Maintaining Accurate Contact Information for Students**

Students are encouraged to make sure Moore Tech has their latest contact information. Please contact the school and notify us with new addresses, emails, and phone numbers.

### **Consumer Information**

The U.S. Department of Education requires colleges that participate in Title IV Financial Aid programs to provide certain information to students and consumers. Consumer Information, Campus Security Reports, Graduation Rates, Placement Rates, and other information can be found on our college website and at [Moore Tech College Navigator](#).

# **Programs and Course Descriptions**

**(All certificate programs are offered in the evening.)**

**Air Conditioning, Refrigeration and Heating (Associate of Applied Technology) 2 year**

**Air Conditioning, Refrigeration and Heating (Diploma) 2 year**

**Air Conditioning, Refrigeration and Heating (Certificate) 2 year**

**Automotive Service Technology (Associate of Applied Technology) 2 year**

**Automotive Service Technology (Diploma) 2 year**

**Industrial Electricity and Plant Maintenance (Associate of Applied Technology) 2 year**

**Industrial Electricity and Plant Maintenance (Diploma) 2 year**

**Industrial Electricity and Plant Maintenance (Certificate) 2 year**

**Machine Shop (Associate of Applied Technology) 2 year**

**Machine Shop (Diploma) 2 year**

**Machine Shop (Certificate) 2 year**

**Plumbing (Certificate) 1 year**

**Maintenance Technology/Property Maintenance (Diploma) 1 year**

**Maintenance Technology/Property Maintenance (Certificate) 1 year**

**Property Maintenance – Advanced (Associate of Applied Technology) 2 year**

**Property Maintenance – Advanced (Diploma) 2 year**

**Property Maintenance – Advanced (Certificate) 2 year**

**Welding (Diploma) 1 year**

**Welding (Certificate) 1 year**

**Welding – Advanced (Associate of Applied Technology) 2 year**

**Welding – Advanced (Diploma) 2 year**

**Welding – Advanced (Certificate) 2 year**

**Air Conditioning, Heating and Refrigeration**  
**Associate of Applied Technology – (2 Year)**  
 Day Students Only (*Mon-Fri 8:30 a.m. – 3:30 p.m.*)

**First Year**

**Fall Term**

EHAC111-D	Electricity for HVAC	6 Credits
	*Technical Elective	6 Credits
	**General Ed Elective	3 Credits

**Winter Term**

BDH112-D	Basic Domestic Heating	6 Credits
	*Technical Elective	6 Credits
	**General Ed Elective	3 Credits

**Spring Term**

ACH113-D	Commercial Heating	6 Credits
	*Technical Elective	6 Credits
	**General Ed Elective	3 Credits

**Second Year**

**Fall Term**

ACR111-D	Introduction to Air Conditioning & Refrigeration	6 Credits
	*Technical Elective	6 Credits
	**General Ed Elective	3 Credits

**Winter Term**

ACR112-D	Commercial Refrigeration	6 Credits
	*Technical Elective	6 Credits
	**General Ed Elective	3 Credits

**Spring Term**

ACR113-D	Air Conditioning	6 Credits
	*Technical Elective	<u>6 Credits</u>

**Total 87 Credits**

\*6 Credit Hour/200 Contact Hour Technical Electives are required outside of student major. Students should take electives that will best complement their career goals.

\*\*See General Education Course Descriptions

# **Air Conditioning, Refrigeration and Heating**

## **Associate of Applied Technology (2 Year)**

### **Course Descriptions**

#### **Day Students Only**

#### **Electricity for HVAC (EHAC111-D) 6 Credits, 200 Contact Hours**

Provides an understanding of the application of electricity in HVAC equipment. Students learn safety, electrical laws, circuits, controls, single and three-phase motors, transformers, control components, and trouble-shooting using control schematics. Solid state devices may be included.

#### **Basic Domestic Heating (BDH112-D) 6 Credits, 200 Contact Hours**

Includes construction and operation of gas furnaces, including electrical circuits, diagnostic, repair and service techniques. Included are components, operation and trouble-shooting of fuel and electrical problems on gas furnaces.

#### **Commercial Heating (ACH113-D) 6 Credits, 200 Contact Hours**

Emphasis on the safe operation of low-pressure boilers, including their construction, components and operation.

#### **Introduction to Air Conditioning & Refrigeration (ACR111-D) 6 Credits, 200 Contact Hours**

The basic principles of air conditioning and refrigeration, the refrigeration cycle, construction and function of components and their relation to each other. Basic repair practices, refrigeration operation, trouble-shooting and servicing also are covered.

#### **Commercial Refrigeration (ACR112-D) 6 Credits, 200 Contact Hours**

An introduction to commercial refrigeration systems. Includes the common causes of malfunction, diagnosis and service procedure for correcting malfunctions. Emphasis is placed on the electrical component, its failure, diagnosis and repair. The calculation of a commercial heat load may be included in this course.

#### **Air Conditioning (ACR113-D) 6 Credits, 200 Contact Hours**

Students learn about mechanical air condition systems, construction, trouble-shooting and service, principles of reverse-cycle systems and service. Electrical components are emphasized. Calculation of heat load may be included.

# Air Conditioning, Heating and Refrigeration Diploma – (2 Year)

Day Students Only (*Mon-Fri 8:30 a.m. – 3:30 p.m.*)

## First Year

### Fall Term

EHAC111-D	Electricity for HVAC	6 Credits
	*Technical Elective	6 Credits

### Winter Term

BDH112-D	Basic Domestic Heating	6 Credits
	*Technical Elective	6 Credits

### Spring Term

ACH113-D	Commercial Heating	6 Credits
	*Technical Elective	6 Credits

## Second Year

### Fall Term

ACR111-D	Introduction to Air Conditioning & Refrigeration	6 Credits
	*Technical Elective	6 Credits

### Winter Term

ACR112-D	Commercial Refrigeration	6 Credits
	*Technical Elective	6 Credits

### Spring Term

ACR113-D	Air Conditioning	6 Credits
	*Technical Elective	<u>6 Credits</u>

Total            72 Credits

\* 6 Credit Hour/200 Contact Hour Technical Electives are required outside of student major. Students should take electives that will best complement their career goals.

# **Air Conditioning, Refrigeration and Heating Diploma (2 Year)**

## **Course Descriptions**

### **Day Students Only**

#### **Electricity for HVAC (EHAC111-D) 6 Credits, 200 Contact Hours**

Provides an understanding of the application of electricity in HVAC equipment. Students learn safety, electrical laws, circuits, controls, single and three-phase motors, transformers, control components, and trouble-shooting using control schematics. Solid state devices may be included.

#### **Basic Domestic Heating (BDH112-D) 6 Credits, 200 Contact Hours**

Includes construction and operation of gas furnaces, including electrical circuits, diagnostic, repair and service techniques. Included are components, operation and trouble-shooting of fuel and electrical problems on gas furnaces.

#### **Commercial Heating (ACH113-D) 6 Credits, 200 Contact Hours**

Emphasis on the safe operation of low-pressure boilers, including their construction, components and operation.

#### **Introduction to Air Conditioning & Refrigeration (ACR111-D) 6 Credits, 200 Contact Hours**

The basic principles of air conditioning and refrigeration, the refrigeration cycle, construction and function of components and their relation to each other. Basic repair practices, refrigeration operation, trouble-shooting and servicing also are covered.

#### **Commercial Refrigeration (ACR112-D) 6 Credits, 200 Contact Hours**

An introduction to commercial refrigeration systems. Includes the common causes of malfunction, diagnosis and service procedure for correcting malfunctions. Emphasis is placed on the electrical component, its failure, diagnosis and repair. The calculation of a commercial heat load may be included in this course.

#### **Air Conditioning (ACR113-D) 6 Credits, 200 Contact Hours**

Students learn about mechanical air condition systems, construction, trouble-shooting and service, principles of reverse-cycle systems and service. Electrical components are emphasized. Calculation of heat load may be included.

# Air Conditioning, Heating and Refrigeration Certificate – (2 Year)

Night Students Only

(Mon/Wed 6:30-9:30 p.m. or Tue/Thurs 6:30-9:30 p.m.)

## First Year

Fall Term

EHAC111-C Electricity for HVAC 3 Credits

Winter Term

BDH112-C Basic Domestic Heating 3 Credits

Spring Term

ACH113-C Commercial Heating 3 Credits

## Second Year

Fall Term

ACR111-C Introduction to Air  
Conditioning & Refrigeration 3 Credits

Winter Term

ACR112-C Commercial Refrigeration 3 Credits

Spring Term

ACR113-C Air Conditioning 3 Credits

Total 18 Credits

# **Air Conditioning, Refrigeration and Heating Certificate (2 Year)**

## **Course Descriptions**

### **Night Students Only**

#### **Electricity for HVAC (EHAC111-C) 3 Credits, 87 Contact Hours**

Provides an understanding of the application of electricity in HVAC equipment. Students learn safety, electrical laws, circuits, controls, single and three-phase motors, transformers, control components, and trouble-shooting using control schematics. Solid state devices may be included.

#### **Basic Domestic Heating (BDH112-C) 3 Credits, 87 Contact Hours**

Includes construction and operation of gas furnaces, including electrical circuits, diagnostic, repair and service techniques. Included are components, operation and trouble-shooting of fuel and electrical problems on gas furnaces.

#### **Commercial Heating (ACH113-C) 3 Credits, 87 Contact Hours**

Emphasis on the safe operation of low-pressure boilers, including their construction, components and operation.

#### **Introduction to Air Conditioning & Refrigeration (ACR111-C) 3 Credits, 87 Contact Hours**

The basic principles of air conditioning and refrigeration, the refrigeration cycle, construction and function of components and their relation to each other. Basic repair practices, refrigeration operation, trouble-shooting and servicing also are covered.

#### **Commercial Refrigeration (ACR112-C) 3 Credits, 87 Contact Hours**

An introduction to commercial refrigeration systems. Includes the common causes of malfunction, diagnosis and service procedure for correcting malfunctions. Emphasis is placed on the electrical component, its failure, diagnosis and repair. The calculation of a commercial heat load may be included in this course.

#### **Air Conditioning (ACR113-C) 3 Credits, 87 Contact Hours**

Students learn about mechanical air condition systems, construction, trouble-shooting and service, principles of reverse-cycle systems and service. Electrical components are emphasized. Calculation of heat load may be included.

# Automotive Service Technology

## Associate of Applied Technology – (2 Year)

Automotive Campus - 2785 S. Mendenhall, Memphis, TN 38115

*Morning Class Schedule (Mon-Fri 7:30 a.m. – 12:30 p.m.)*

*Afternoon Class Schedule (Mon-Fri 11:30 a.m. – 4:30 p.m.)*

*Night Class Schedule (Mon-Thur 4:30 p.m. – 10:30 p.m.)*

*Note: Schedule for Work-Based training will depend on local dealerships.*

Students applying for automotive programs must apply using the special Automotive Admission Application.

### First Year

#### First Term

AUTO101-D	Automotive Service Technician Basics	12 Credits
	*General Ed Elective	3 Credits

#### Second Term

AUTO102-D	Maintenance, Brakes, Suspension	12 Credits
	*General Ed Elective	3 Credits

#### Third Term

AUTO103-D	Internal Engine, HVAC, and Cooling System	12 Credits
	*General Ed Elective	3 Credits

### Second Year

#### First Term

AUTO201-D	Automotive Transmissions And Drive Trains	12 Credits
	*General Ed Elective	3 Credits

#### Second Term

AUTO202-D	Engine Performance and Advanced Automotive Systems	12 Credits
	*General Ed Elective	3 Credits

#### Third Term

AUTO203-D	Professional Full-Time Internship	<u>12 Credits</u>
	<b>Total</b>	<b>87 Credits</b>

\*See General Education Course Descriptions

# **Automotive Service Technology**

## **Associate of Applied Technology – (2 Year)**

### **Course Descriptions**

#### **Automotive Service Technician Basics (AUTO101-D) 12 Credits, 260 Contact Hours**

Dealership job roles, shop safety, vehicle lifting, multi-point inspections, electronic repair orders, checking for recalls and service information, electricity, controller area networks, using service information, and supplemental restraint systems.

#### **Maintenance, Brakes and Suspension (AUTO102-D) 12 Credits, 260 Contact Hours**

Maintenance, Brakes and Suspension (AUTO-102) Oil and filter changes, resetting indicators, fluid drain and fill, fluid flushes, brake hydraulic principles, brake system parts and service, antilock and stability assist, suspension system parts and service, wheel and tire service, and wheel alignment.

#### **Internal Engine, HVAC, and Cooling System (AUTO103-D) 12 Credits, 260 Contact Hours**

Engine configurations, designs, materials and construction; engine block and head disassembly, inspection and reassembly; timing components, gaskets, seals, fasteners, cooling system, and heating and air conditioning system.

#### **Automotive Transmissions and Drive Trains (AUTO201-D) 12 Credits, 260 Contact Hours**

Clutches, gear ratios, manual gear boxes, shift linkage, 4wd/awd transfer units, propeller shafts, drive axle assemblies, c.v. axles, automated manual units, automatic transmissions/transaxles, c.v.t. units, disassembly, and inspection and reassembly of manual and automatic transmissions.

#### **Engine Performance and Advanced Automotive Systems (AUTO202-D) 12 Credits, 260 Contact Hours**

Delivery of air and fuel, fuel types, forced induction, variable timing operation, cylinder de-activation systems, vehicle drivability, driver assistance system performance and service, and infotainment systems and apps.

#### **Professional Full-Time Internship (AUTO203-D) 12 Credits, 560 Work-Based Contact Hours**

Students work at a new-car dealership at least 40 hours each week for at least 14 weeks. Employer feedback will result in a numeric grade. Students must maintain at least a C average to pass this class.

# Automotive Service Technology

## Diploma– (2 Year)

Automotive Campus - 2785 S. Mendenhall, Memphis, TN 38115

*Morning Class Schedule (Mon-Fri 7:30 a.m. – 12:30 p.m.)*

*Afternoon Class Schedule (Mon-Fri 11:30 a.m. – 4:30 p.m.)*

*Night Class Schedule (Mon-Thur 4:30 p.m. – 10:30 p.m.)*

*Note: Schedule for Work-Based training will depend on local dealerships.*

Students applying for automotive programs must apply using the special Automotive Admission Application.

### First Year

#### First Term

AUTO101-D	Automotive Service Technician Basics	12 Credits
-----------	--------------------------------------	------------

#### Second Term

AUTO102-D	Maintenance, Brakes, Suspension	12 Credits
-----------	---------------------------------	------------

#### Third Term

AUTO103-D	Internal Engine, HVAC, and Cooling System	12 Credits
-----------	---	------------

### Second Year

#### First Term

AUTO201-D	Automotive Transmissions And Drive Trains	12 Credits
-----------	---	------------

#### Second Term

AUTO202-D	Engine Performance and Advanced Automotive Systems	12 Credits
-----------	--	------------

#### Third Term

AUTO203-D	Professional Full-Time Internship	<u>12 Credits</u>
	<b>Total</b>	<b>72 Credits</b>

# **Automotive Service Technology**

## **Diploma– (2 Year)**

### **Course Descriptions**

#### **Automotive Service Technician Basics (AUTO101-D) 12 Credits, 260 Contact Hours**

Dealership job roles, shop safety, vehicle lifting, multi-point inspections, electronic repair orders, checking for recalls and service information, electricity, controller area networks, using service information, and supplemental restraint systems.

#### **Maintenance, Brakes and Suspension (AUTO102-D) 12 Credits, 260 Contact Hours**

Maintenance, Brakes and Suspension (AUTO-102) Oil and filter changes, resetting indicators, fluid drain and fill, fluid flushes, brake hydraulic principles, brake system parts and service, antilock and stability assist, suspension system parts and service, wheel and tire service, and wheel alignment.

#### **Internal Engine, HVAC, and Cooling System (AUTO103-D) 12 Credits, 260 Contact Hours**

Engine configurations, designs, materials and construction; engine block and head disassembly, inspection and reassembly; timing components, gaskets, seals, fasteners, cooling system, and heating and air conditioning system.

#### **Automotive Transmissions and Drive Trains (AUTO201-D) 12 Credits, 260 Contact Hours**

Clutches, gear ratios, manual gear boxes, shift linkage, 4wd/awd transfer units, propeller shafts, drive axle assemblies, c.v. axles, automated manual units, automatic transmissions/transaxles, c.v.t. units, disassembly, and inspection and reassembly of manual and automatic transmissions.

#### **Engine Performance and Advanced Automotive Systems (AUTO202-D) 12 Credits, 260 Contact Hours**

Delivery of air and fuel, fuel types, forced induction, variable timing operation, cylinder de-activation systems, vehicle drivability, driver assistance system performance and service, and infotainment systems and apps.

#### **Professional Full-Time Internship (AUTO203-D) 12 Credits, 560 Work-Based Contact Hours**

Students work at a new-car dealership at least 40 hours each week for at least 14 weeks. Employer feedback will result in a numeric grade. Students must maintain at least a C average to pass this class.

# Industrial Electricity and Plant Maintenance

## Associate of Applied Technology – (2 Year)

Day Students Only (*Mon-Fri 8:30 a.m. – 3:30 p.m.*)

### First Year

#### Fall Term

IE-111-D	Electrical Wiring, Residential & National Electric Code	6 Credits
	*Technical Elective	6 Credits
	**General Ed Elective	3 Credits

#### Winter Term

IE-112-D	Electricity 3	6 Credits
	*Technical Elective	6 Credits
	**General Ed Elective	3 Credits

#### Spring Term

IE-113-D	Electricity 1 & 2	6 Credits
	*Technical Elective	6 Credits
	**General Ed Elective	3 Credits

### Second Year

#### Fall Term

IE-212-D	Industrial Fluid Power	6 Credits
	*Technical Elective	6 Credits
	**General Ed Elective	3 Credits

#### Winter Term

IE-213-D	Electric Motor Control	6 Credits
	*Technical Elective	6 Credits
	**General Ed Elective	3 Credits

#### Spring Term

IE-214-D	Intro to Programmable Logic Controllers (PLC)	6 Credits
	*Technical Elective	<u>6 Credits</u>

Total **87 Credits**

\*6 Credit Hour/200 Contact Hour Technical Electives are required outside of student major. Students should take electives that will best complement their career goals.

\*\*See General Education Course Descriptions

# **Industrial Electricity and Plant Maintenance**

## **Associate of Applied Technology – (2 Year)**

### **Course Descriptions**

**Day Students Only**

## **Course Descriptions**

### **Electrical Wiring, Residential & National Electric Code (IE-111-D) 6 Credits, 200**

#### **Contact Hours**

Study includes wiring symbols, outlets, conductor sizes, circuits, special-purpose outlets, television, telephone, signal systems and general specifications.

### **Electricity 3 (IE-112-D) 6 Credits, 200 Contact Hours**

Centers on DC (Direct Current) theory as it applies to generators, motors and controllers. Generator types covered include separately and self-excited and compound-wound models. Also covers shunt, series and compound motors. Speed controllers, rheostats, automatic motor controllers, polyphase circuits and transformers are studied.

### **Electricity 1 & 2 (IE-113-D) 6 Credits, 200 Contact Hours**

Electricity 1 presents a basic understanding of electrical theory as it applies to Direct Current (DC) in devices, circuits and materials. Electron theory and Ohm's Law, series, parallel and combination circuits are also studied. Electricity 2 covers theory and application of Alternating Current (AC) in circuits, controls and devices. Inductance and capacitance are studied.

### **Industrial Fluid Power (IE-212-D) 6 Credits, 200 Contact Hours**

Demonstrates use of fluid and air power in industrial applications. Also covers laws of each power system, transmission of force and power and conversion of fluid pressure into mechanical force. Piping systems peculiar to each power system are discussed, as are different cylinders. Valves, pumps and system accessories are compared as to system and application.

### **Electric Motor Control (IE-213-D) 6 Credits, 200 Contact Hours**

Covers electric motor starters and controllers, control pilot devices, circuit layout and symbols, AC reduced voltage starters, 3-phase multi-speed controllers, DC controllers, motor drives and synchronous controls.

### **Intro to Programmable Logic Controllers PLC (IE-214-D) 6 Credits, 200 Contact Hours**

Introduces PLC hardware and programming as it is applied in industrial applications and automation. Covers analog and digital input devices, digital output devices and their uses.

# Industrial Electricity and Plant Maintenance Diploma – (2 Year)

Day Students Only (*Mon-Fri 8:30 a.m. – 3:30 p.m.*)

## First Year

### Fall Term

IE-111-D	Electrical Wiring, Residential & National Electric Code	6 Credits
	*Technical Elective	6 Credits

### Winter Term

IE-112-D	Electricity 3	6 Credits
	*Technical Elective	6 Credits

### Spring Term

IE-113-D	Electricity 1 & 2	6 Credits
	*Technical Elective	6 Credits

## Second Year

### Fall Term

IE-212-D	Industrial Fluid Power	6 Credits
	*Technical Elective	6 Credits

### Winter Term

IE-213-D	Electric Motor Control	6 Credits
	*Technical Elective	6 Credits

### Spring Term

IE-214-D	Intro to Programmable Logic Controllers (PLC)	6 Credits
	*Technical Elective	<u>6 Credits</u>

Total            72 Credits

\*6 Credit Hour/200 Contact Hour Technical Electives are required outside of student major. Students should take electives that will best complement their career goals.

# **Industrial Electricity and Plant Maintenance**

## **Associate of Applied Technology – (2 Year)**

### **Course Descriptions**

**Day Students Only**

## **Course Descriptions**

### **Electrical Wiring, Residential & National Electric Code (IE-111-D) 6 Credits, 200**

#### **Contact Hours**

Study includes wiring symbols, outlets, conductor sizes, circuits, special-purpose outlets, television, telephone, signal systems and general specifications.

### **Electricity 3 (IE-112-D) 6 Credits, 200 Contact Hours**

Centers on DC (Direct Current) theory as it applies to generators, motors and controllers. Generator types covered include separately and self-excited and compound-wound models. Also covers shunt, series and compound motors. Speed controllers, rheostats, automatic motor controllers, polyphase circuits and transformers are studied.

### **Electricity 1 & 2 (IE-113-D) 6 Credits, 200 Contact Hours**

Electricity 1 presents a basic understanding of electrical theory as it applies to Direct Current (DC) in devices, circuits and materials. Electron theory and Ohm's Law, series, parallel and combination circuits are also studied. Electricity 2 covers theory and application of Alternating Current (AC) in circuits, controls and devices. Inductance and capacitance are studied.

### **Industrial Fluid Power (IE-212-D) 6 Credits, 200 Contact Hours**

Demonstrates use of fluid and air power in industrial applications. Also covers laws of each power system, transmission of force and power and conversion of fluid pressure into mechanical force. Piping systems peculiar to each power system are discussed, as are different cylinders. Valves, pumps and system accessories are compared as to system and application.

### **Electric Motor Control (IE-213-D) 6 Credits, 200 Contact Hours**

Covers electric motor starters and controllers, control pilot devices, circuit layout and symbols, AC reduced voltage starters, 3-phase multi-speed controllers, DC controllers, motor drives and synchronous controls.

### **Intro to Programmable Logic Controllers PLC (IE-214-D) 6 Credits, 200 Contact Hours**

Introduces PLC hardware and programming as it is applied in industrial applications and automation. Covers analog and digital input devices, digital output devices and their uses.

# Industrial Electricity and Plant Maintenance Certificate – (2 Year)

Night Students Only

(Mon/Wed 6:30-9:30 p.m. or Tue/Thurs 6:30-9:30 p.m.)

## First Year

Fall Term

IE-111-C	Electrical Wiring, Residential & National Electric Code	3 Credits
----------	--	-----------

Winter Term

IE-112-C	Electricity 3	3 Credits
----------	---------------	-----------

Spring Term

IE-113-C	Electricity 1 & 2	3 Credits
----------	-------------------	-----------

## Second Year

Fall Term

IE-212-C	Industrial Fluid Power	3 Credits
----------	------------------------	-----------

Winter Term

IE-213-C	Electric Motor Control	3 Credits
----------	------------------------	-----------

Spring Term

IE-214-C	Intro to Programmable Logic Controllers (PLC)	<u>3 Credits</u>
----------	--	------------------

Total		18 Credits
-------	--	------------

# **Industrial Electricity and Plant Maintenance Certificate – (2 Year)**

## **Course Descriptions**

**Night Students Only**

## **Course Descriptions**

### **Electrical Wiring, Residential & National Electric Code (IE-111-C) 3 Credits, 87**

#### **Contact Hours**

Study includes wiring symbols, outlets, conductor sizes, circuits, special-purpose outlets, television, telephone, signal systems and general specifications.

### **Electricity 3 (IE-112-D) 3 Credits, 87 Contact Hours**

Centers on DC (Direct Current) theory as it applies to generators, motors and controllers. Generator types covered include separately and self-excited and compound-wound models. Also covers shunt, series and compound motors. Speed controllers, rheostats, automatic motor controllers, polyphase circuits and transformers are studied.

### **Electricity 1 & 2 (IE-113-D) 3 Credits, 87 Contact Hours**

Electricity 1 presents a basic understanding of electrical theory as it applies to Direct Current (DC) in devices, circuits and materials. Electron theory and Ohm's Law, series, parallel and combination circuits are also studied. Electricity 2 covers theory and application of Alternating Current (AC) in circuits, controls and devices. Inductance and capacitance are studied.

### **Industrial Fluid Power (IE-212-D) 3 Credits, 87 Contact Hours**

Demonstrates use of fluid and air power in industrial applications. Also covers laws of each power system, transmission of force and power and conversion of fluid pressure into mechanical force. Piping systems peculiar to each power system are discussed, as are different cylinders. Valves, pumps and system accessories are compared as to system and application.

### **Electric Motor Control (IE-213-D) 3 Credits, 87 Contact Hours**

Covers electric motor starters and controllers, control pilot devices, circuit layout and symbols, AC reduced voltage starters, 3-phase multi-speed controllers, DC controllers, motor drives and synchronous controls.

### **Intro to Programmable Logic Controllers PLC (IE-214-C) 3 Credits, 87 Contact Hours**

Introduces PLC hardware and programming as it is applied in industrial applications and automation. Covers analog and digital input devices, digital output devices and their uses.

**Machining Technology – Machine Shop**  
**Associate of Applied Technology – (2 Year)**  
 Day Students Only (*Mon-Fri 8:30 a.m. – 3:30 p.m.*)

**First Year**

**First Term**

<b>BMT111-D</b>	<b>Basic Machining Technology</b>	<b>6 Credits</b>
	<b>*Technical Elective</b>	<b>6 Credits</b>
	<b>*General Ed Elective</b>	<b>3 Credits</b>

**Second Term**

<b>MSP112-D</b>	<b>Machine Shop Practice</b>	<b>6 Credits</b>
	<b>*Technical Elective</b>	<b>6 Credits</b>
	<b>*General Ed Elective</b>	<b>3 Credits</b>

**Third Term**

<b>MM113-D</b>	<b>Machining Metals</b>	<b>6 Credits</b>
	<b>*Technical Elective</b>	<b>6 Credits</b>
	<b>*General Ed Elective</b>	<b>3 Credits</b>

**Second Year**

**First Term**

<b>CNC211-D</b>	<b>CNC Lathe</b>	<b>6 Credits</b>
	<b>*Technical Elective</b>	<b>6 Credits</b>
	<b>*General Ed Elective</b>	<b>3 Credits</b>

**Second Term**

<b>CNC212-D</b>	<b>CNC Milling</b>	<b>6 Credits</b>
	<b>*Technical Elective</b>	<b>6 Credits</b>
	<b>*General Ed Elective</b>	<b>3 Credits</b>

**Third Term**

<b>PMM213-D</b>	<b>Precision Medical Machining</b>	<b>6 Credits</b>
	<b>*Technical Elective</b>	<b><u>6 Credits</u></b>

**Total 87 Credits**

**\*6 Credit Hour/200 Contact Hour Technical Electives are required outside of student major. Students should take electives that will best complement their career goals.**

**\*See General Education Electives**

# **Machining Technology – Machine Shop**

## **Associate of Applied Technology – (2 Year)**

### **Course Descriptions**

#### **Day Students Only**

#### **Basic Machining Technology (BMT111-D) 6 Credit Hours, 200 Contact Hours**

Students are introduced to all basic hand tools and their uses, manual lathes, grinders, drill presses, saws and measuring instruments.

#### **Machine Shop Practice (MSP112-D) 6 Credit Hours, 200 Contact Hours**

BMT-111 or equivalent is required to enroll. This course emphasizes the application and skill to use machines and tools required for project work. Continue study of added tools such as horizontal and vertical milling machines, surface grinding and others.

#### **Machining Metals I (MM113-D) 6 Credit Hours, 200 Contact Hours**

MSP-112 or equivalent is required to enroll. Students are introduced to machine shop theory and procedures which provide information and practice in using basic machine tools and selecting the tools and materials required for more advanced cutting and finishing operations.

#### **CNC Lathe (CNC211-D) 6 Credit Hours, 200 Contact Hours**

Students will learn to use CNC Lathes in order to cut and finish work according to blueprint or written specifications and according to National Institute for Metalworking Skills (NIMS) standards.

#### **CNC Milling (CNC212-D) 6 Credit Hours, 200 Contact Hours**

Students will learn to use CNC Mills in order to cut and finish work according to blueprint or written specifications and National Institute of Metalworking Skills (NIMS) standards.

#### **Precision Medical Machining (PMM213-D) 6 Credit Hours, 200 Contact Hours**

Students will be exposed to the general operations, documentation, and procedures in a medical machine shop environment and the precision requirements therein.

# Machining Technology – Machine Shop

## Diploma– (2 Year)

Day Students Only (*Mon-Fri 8:30 a.m. – 3:30 p.m.*)

### First Year

#### First Term

BMT111-D	Basic Machining Technology	6 Credits
	*Technical Elective	6 Credits

#### Second Term

MSP112-D	Machine Shop Practice	6 Credits
	*Technical Elective	6 Credits

#### Third Term

MM113-D	Machining Metals	6 Credits
	*Technical Elective	6 Credits

### Second Year

#### First Term

CNC211-D	CNC Lathe	6 Credits
	*Technical Elective	6 Credits

#### Second Term

CNC212-D	CNC Milling	6 Credits
	*Technical Elective	6 Credits

#### Third Term

PMM213-D	Precision Medical Machining	6 Credits
	*Technical Elective	<u>6 Credits</u>

Total 72 Credits

\*6 Credit Hour/200 Contact Hour Technical Electives are required outside of student major. Students should take electives that will best complement their career goals.

# **Machining Technology – Machine Shop**

## **Diploma– (2 Year)**

### **Course Descriptions**

#### **Day Students Only**

#### **Basic Machining Technology (BMT111-D) 6 Credit Hours, 200 Contact Hours**

Students are introduced to all basic hand tools and their uses, manual lathes, grinders, drill presses, saws and measuring instruments.

#### **Machine Shop Practice (MSP112-D) 6 Credit Hours, 200 Contact Hours**

BMT-111 or equivalent is required to enroll. This course emphasizes the application and skill to use machines and tools required for project work. Continue study of added tools such as horizontal and vertical milling machines, surface grinding and others.

#### **Machining Metals I (MM113-D) 6 Credit Hours, 200 Contact Hours**

MSP-112 or equivalent is required to enroll. Students are introduced to machine shop theory and procedures which provide information and practice in using basic machine tools and selecting the tools and materials required for more advanced cutting and finishing operations.

#### **CNC Lathe (CNC211-D) 6 Credit Hours, 200 Contact Hours**

Students will learn to use CNC Lathes in order to cut and finish work according to blueprint or written specifications and according to National Institute for Metalworking Skills (NIMS) standards.

#### **CNC Milling (CNC212-D) 6 Credit Hours, 200 Contact Hours**

Students will learn to use CNC Mills in order to cut and finish work according to blueprint or written specifications and National Institute of Metalworking Skills (NIMS) standards.

#### **Precision Medical Machining (PMM213-D) 6 Credit Hours, 200 Contact Hours**

Students will be exposed to the general operations, documentation, and procedures in a medical machine shop environment and the precision requirements therein.

# Machining Technology – Machine Shop Certificate – (2 Year)

Night Students Only

*(Mon/Wed 6:30-9:30 p.m. or Tue/Thurs 6:30-9:30 p.m.)*

## First Year

First Term

BMT111-C	Basic Machining Technology	3 Credits
----------	----------------------------	-----------

Second Term

MSP112-C	Machine Shop Practice	3 Credits
----------	-----------------------	-----------

Third Term

MM113-C	Machining Metals	3 Credits
---------	------------------	-----------

## Second Year

First Term

CNC211-C	CNC Lathe	3 Credits
----------	-----------	-----------

Second Term

CNC212-C	CNC Milling	3 Credits
----------	-------------	-----------

Third Term

PMM213-C	Precision Medical Machining	<u>3 Credits</u>
----------	-----------------------------	------------------

	<b>Total</b>	<b>18 Credits</b>
--	--------------	-------------------

# **Machining Technology – Machine Shop Certificate– (2 Year)**

## **Course Descriptions**

### **Night Students Only**

#### **Basic Machining Technology (BMT111-C) 3 Credit Hours, 87 Contact Hours**

Students are introduced to all basic hand tools and their uses, manual lathes, grinders, drill presses, saws and measuring instruments.

#### **Machine Shop Practice (MSP112-C) 3 Credit Hours, 87 Contact Hours**

BMT-111 or equivalent is required to enroll. This course emphasizes the application and skill to use machines and tools required for project work. Continue study of added tools such as horizontal and vertical milling machines, surface grinding and others.

#### **Machining Metals I (MM113-C) 3 Credit Hours, 87 Contact Hours**

MSP-112 or equivalent is required to enroll. Students are introduced to machine shop theory and procedures which provide information and practice in using basic machine tools and selecting the tools and materials required for more advanced cutting and finishing operations.

#### **CNC Lathe (CNC211-C) 3 Credit Hours, 87 Contact Hours**

Students will learn to use CNC Lathes in order to cut and finish work according to blueprint or written specifications and according to National Institute for Metalworking Skills (NIMS) standards.

#### **CNC Milling (CNC212-C) 3 Credit Hours, 87 Contact Hours**

Students will learn to use CNC Mills in order to cut and finish work according to blueprint or written specifications and National Institute of Metalworking Skills (NIMS) standards.

#### **Precision Medical Machining (PMM213-C) 3 Credit Hours, 87 Contact Hours**

Students will be exposed to the general operations, documentation, and procedures in a medical machine shop environment and the precision requirements therein.

## Plumbing Certificate – (1 Year)

Night Students Only (*Tue/Thurs 6:30-9:30 p.m.*)

### First Year

#### First Term

PM113-C	Property Maintenance – Plumbing Repair	3 Credits
---------	--	-----------

#### Second Term

PM114-C	Commercial Plumbing Fixtures, Water Heating Systems and Fuel Gas Applications	3 Credits
---------	---	-----------

#### Third Term

PM115-C	Drain, Waste, Vent, Potable Water Distribution Materials and Design	<u>3 Credits</u>
---------	---	------------------

	<b>Total</b>	<b>9 Credits</b>
--	--------------	------------------

## **Plumbing Certificate – (1 Year)**

### **Course Descriptions**

#### **Night Students Only**

#### **Property Maintenance – Plumbing Repair (PM113-C) 3 Credits, 84 Contact Hours**

This course covers basic residential plumbing systems and the use of various plumbing materials. Students will learn how to cut and join the various types of pipes and tubing found in a plumbing environment such as Copper, PEX, CPVC, and Black Iron Pipe. Repairing or replacing leaking or broken faucets, pipes, sinks, toilets, disposals, sink traps, drain and hot water storage tanks. Plumbing code and safety is integrated into course.

#### **Commercial Plumbing Fixtures, Water Heating Systems and Fuel Gas Applications (PM114-C) 3 Credits, 84 Contact Hours**

This course focus is commercial plumbing fixtures, water heating systems and fuel gas applications. Topics to include but are not limited to, troubleshooting, removal and installation of various commercial sinks, urinals, water closets and both manual and automated flushing valves. Troubleshooting, removal and installation of various water heating systems. Fuel gas distribution systems design, installation, chimneys and vents.

#### **Drain, Waste, Vent, Potable Water Distribution Materials & Design (PM115-C) 3 Credits, 84 Contact Hours**

The objective of this course is to increase the students' knowledge of Drain, Waste and Vent systems, potable water distribution design & materials, joining pipes, and backflow contamination protection, etc. Topics covered include but are not limited to: sanitary drainage, vent systems, DWV materials, and drain cleaning machines.

# Maintenance Technology (Property Maintenance)

## Diploma – (1 Year)

Day Students Only (*Mon-Fri 8:30 a.m. – 3:30 p.m.*)

### First Year

#### First Term

PM111-D	Property Maintenance- Electrical Repair	6 Credits
	*Technical Elective	6 Credits

#### Second Term

PM112-D	Property Maintenance- Carpentry Repair	6 Credits
	*Technical Elective	6 Credits

#### Third Term

PM113-D	Property Maintenance- Plumbing Repair	6 Credits
	*Technical Elective	<u>6 Credits</u>
	<b>Total</b>	<b>36 Credits</b>

**\*6 Credit Hour/200 Contact Hour Technical Electives are required outside of student major. Students should take electives that will best complement their career goals.**

# **Maintenance Technology (Property Maintenance)**

## **Diploma – (1 Year)**

### **Course Descriptions**

**Day Students Only (Mon-Fri 8:30 a.m. – 3:30 p.m.)**

#### **Property Maintenance - Electrical Repair (PM-111-D) 6 Credit Hours, 200 Contact Hours**

An introduction to electrical safety, including basic electrical theory, electrical terms, wiring symbols and basic residential electrical diagrams. Installation, repairing and/or replacing electrical circuits, regular receptacles, GFCI receptacles, circuit breakers, switches, lighting fixtures, fluorescent lighting and ceiling fans. Locating and repairing electrical shorts. Introduction to low-voltage systems and low-voltage-circuit design and function, as well as training in building inspection for electrical components.

#### **Property Maintenance - Carpentry Repair (PM-112-D) 6 Credit Hours, 200 Contact Hours**

An introduction to maintenance carpentry and general repair, including safety in use of hand and power tools. Using various carpentry materials, measuring, layout and cutting techniques. Use of adhesives and fasteners. Replacing or repairing dry wall, door locks, doors and windows, as well as training in building inspection for structural components.

#### **Property Maintenance - Plumbing Repair (PM-113-D) 6 Credit Hours, 200 Contact Hours**

An introduction to plumbing safety. Basic residential plumbing systems and use of various plumbing materials. Using, repairing and replacing PVC pipe and copper tubing including brazing and soldering. Faucet and toilet construction and parts. Repairing or replacing leaking or broken faucets, pipes, sinks, toilets, disposals, and sink traps, drain and hot water heater servicing. Training in building inspection for plumbing components also is included.

# Maintenance Technology (Property Maintenance) Certificate – (1 Year)

Night Students Only

*(Mon/Wed 6:30-9:30 p.m. or Tue/Thurs 6:30-9:30 p.m.)*

## First Year

### First Term

PM111-D	Property Maintenance- Electrical Repair	3 Credits
---------	--	-----------

### Second Term

PM112-D	Property Maintenance- Carpentry Repair	3 Credits
---------	---	-----------

### Third Term

PM113-D	Property Maintenance- Plumbing Repair	<u>3 Credits</u>
	Total	9 Credits

# **Maintenance Technology (Property Maintenance)**

## **Certificate – (1 Year)**

### **Course Descriptions**

#### **Night Students Only**

#### **Property Maintenance - Electrical Repair (PM-111-C) 3 Credit Hours, 84 Contact Hours**

An introduction to electrical safety, including basic electrical theory, electrical terms, wiring symbols and basic residential electrical diagrams. Installation, repairing and/or replacing electrical circuits, regular receptacles, GFCI receptacles, circuit breakers, switches, lighting fixtures, fluorescent lighting and ceiling fans. Locating and repairing electrical shorts. Introduction to low-voltage systems and low-voltage-circuit design and function, as well as training in building inspection for electrical components.

#### **Property Maintenance - Carpentry Repair (PM-112-C) 3 Credit Hours, 84 Contact Hours**

An introduction to maintenance carpentry and general repair, including safety in use of hand and power tools. Using various carpentry materials, measuring, layout and cutting techniques. Use of adhesives and fasteners. Replacing or repairing dry wall, door locks, doors and windows, as well as training in building inspection for structural components.

#### **Property Maintenance - Plumbing Repair (PM-113-C) 3 Credit Hours, 84 Contact Hours**

An introduction to plumbing safety. Basic residential plumbing systems and use of various plumbing materials. Using, repairing and replacing PVC pipe and copper tubing including brazing and soldering. Faucet and toilet construction and parts. Repairing or replacing leaking or broken faucets, pipes, sinks, toilets, disposals, and sink traps, drain and hot water heater servicing. Training in building inspection for plumbing components also is included.

**Property Maintenance-Advanced**  
**Associate of Applied Technology– (2 Year)**  
 Day Students Only (*Mon-Fri 8:30 a.m. – 3:30 p.m.*)

**First Year**

**First Term**

<b>PM111-D</b>	<b>Property Maintenance- Electrical Repair</b>	<b>6 Credits</b>
	<b>*Technical Elective</b>	<b>6 Credits</b>
	<b>**General Ed Elective</b>	<b>3 Credits</b>

**Second Term**

<b>PM112-D</b>	<b>Property Maintenance- Carpentry Repair</b>	<b>6 Credits</b>
	<b>*Technical Elective</b>	<b>6 Credits</b>
	<b>**General Ed Elective</b>	<b>3 Credits</b>

**Third Term**

<b>PM113-D</b>	<b>Property Maintenance- Plumbing Repair</b>	<b>6 Credits</b>
	<b>*Technical Elective</b>	<b>6 Credits</b>
	<b>**General Ed Elective</b>	<b>3 Credits</b>

**Second Year (Option 1)**

(If student's technical electives are not in HVAC)

**First Term**

<b>ACR111-D</b>	<b>Intro to Air Conditioning &amp; Refrigeration</b>	<b>6 Credits</b>
	<b>*Technical Elective</b>	<b>6 Credits</b>
	<b>**General Ed Elective</b>	<b>3 Credits</b>

**Second Term**

<b>BDH112-D</b>	<b>Basic Domestic Heating</b>	<b>6 Credits</b>
	<b>*Technical Elective</b>	<b>6 Credits</b>
	<b>**General Ed Elective</b>	<b>3 Credits</b>

**Third Term**

<b>PM212-D</b>	<b>Property Maintenance- Carpentry Repair 2</b>	<b>6 Credits</b>
	<b>*Technical Elective</b>	<b><u>6 Credits</u></b>

**Total** **87 Credits**

## Second Year (Option 2)

(If student's technical electives are in HVAC)

### First Term

WELD111-D	Intro to Welding	6 Credits
	*Technical Elective	6 Credits
	**General Ed Elective	3 Credits

### Second Term

IE112-D	Electricity 3	6 Credits
	*Technical Elective	6 Credits
	**General Ed Elective	3 Credits

### Third Term

PM212-D	Property Maintenance- Carpentry Repair 2	6 Credits
	*Technical Elective	<u>6 Credits</u>
	<b>Total</b>	<b>87 Credits</b>

\*6 Credit Hour/200 Contact Hour Technical Electives are required outside of student major. Students should take electives that will best complement their career goals.

\*\*See General Education Course Electives

# **Property Maintenance-Advanced**

## **Associate of Applied Technology– (2 Year)**

### **Course Descriptions**

#### **Day Students Only**

#### **Property Maintenance - Electrical Repair (PM-111-D) 6 Credit Hours, 200 Contact Hours**

An introduction to electrical safety, including basic electrical theory, electrical terms, wiring symbols and basic residential electrical diagrams. Installation, repairing and/or replacing electrical circuits, regular receptacles, GFCI receptacles, circuit breakers, switches, lighting fixtures, fluorescent lighting and ceiling fans. Locating and repairing electrical shorts. Introduction to low-voltage systems and low-voltage-circuit design and function, as well as training in building inspection for electrical components.

#### **Property Maintenance - Carpentry Repair (PM-112-D) 6 Credit Hours, 200 Contact Hours**

An introduction to maintenance carpentry and general repair, including safety in use of hand and power tools. Using various carpentry materials, measuring, layout and cutting techniques. Use of adhesives and fasteners. Replacing or repairing dry wall, door locks, doors and windows, as well as training in building inspection for structural components.

#### **Property Maintenance - Plumbing Repair (PM-113-D) 6 Credit Hours, 200 Contact Hours**

An introduction to plumbing safety. Basic residential plumbing systems and use of various plumbing materials. Using, repairing and replacing PVC pipe and copper tubing including brazing and soldering. Faucet and toilet construction and parts. Repairing or replacing leaking or broken faucets, pipes, sinks, toilets, disposals, and sink traps, drain and hot water heater servicing. Training in building inspection for plumbing components also is included.

#### **Intro to Air Conditioning & Refrigeration (ACR-111-D) 6 Credit Hours, 200 Contact Hours**

The basic principles of air conditioning and refrigeration, the refrigeration cycle, construction and function of components and their relation to each other. Basic repair practices, refrigeration operation, trouble-shooting and servicing also are covered.

#### **Property Maintenance – Carpentry 2 (PM-212-D) 6 Credit Hours, 200 Contact Hours**

This course teaches material procurement, researching material, working within budgets, job cost estimation and presenting proposals; setting up scaffolding and use of fall arrest PPE gear needed for scaffold situations, the purpose of drop in ceilings as well as their installation. Flooring materials and installation is included. A review of roofing materials, common inspection, installation and repair techniques will be reviewed. Insulation, attic ventilation and the use of integrating solar energy into building design will be reviewed.

## Property Maintenance-Advanced

### Diploma– (2 Year)

Day Students Only (*Mon-Fri 8:30 a.m. – 3:30 p.m.*)

#### First Year

##### First Term

PM111-D	Property Maintenance- Electrical Repair	6 Credits
	*Technical Elective	6 Credits

##### Second Term

PM112-D	Property Maintenance- Carpentry Repair	6 Credits
	*Technical Elective	6 Credits

##### Third Term

PM113-D	Property Maintenance- Plumbing Repair	6 Credits
	*Technical Elective	6 Credits

#### Second Year (Option 1)

(If student's technical electives are not in HVAC)

##### First Term

ACR111-D	Intro to Air Conditioning & Refrigeration	6 Credits
	*Technical Elective	6 Credits

##### Second Term

BDH112-D	Basic Domestic Heating	6 Credits
	*Technical Elective	6 Credits

##### Third Term

PM212-D	Property Maintenance- Carpentry Repair 2	6 Credits
	*Technical Elective	<u>6 Credits</u>

**Total**                      **72 Credits**

## Second Year (Option 2)

(If student's technical electives are in HVAC)

### First Term

WELD111-D	Intro to Welding	6 Credits
	*Technical Elective	6 Credits

### Second Term

IE112-D	Electricity 3	6 Credits
	*Technical Elective	6 Credits

### Third Term

PM212-D	Property Maintenance- Carpentry Repair 2	6 Credits
	*Technical Elective	<u>6 Credits</u>
	Total	72 Credits

\*6 Credit Hour/200 Contact Hour Technical Electives are required outside of student major. Students should take electives that will best complement their career goals.

# **Property Maintenance-Advanced**

## **Diploma – (2 Year)**

### **Course Descriptions**

#### **Day Students Only**

#### **Property Maintenance - Electrical Repair (PM-111-D) 6 Credit Hours, 200 Contact Hours**

An introduction to electrical safety, including basic electrical theory, electrical terms, wiring symbols and basic residential electrical diagrams. Installation, repairing and/or replacing electrical circuits, regular receptacles, GFCI receptacles, circuit breakers, switches, lighting fixtures, fluorescent lighting and ceiling fans. Locating and repairing electrical shorts. Introduction to low-voltage systems and low-voltage-circuit design and function, as well as training in building inspection for electrical components.

#### **Property Maintenance - Carpentry Repair (PM-112-D) 6 Credit Hours, 200 Contact Hours**

An introduction to maintenance carpentry and general repair, including safety in use of hand and power tools. Using various carpentry materials, measuring, layout and cutting techniques. Use of adhesives and fasteners. Replacing or repairing dry wall, door locks, doors and windows, as well as training in building inspection for structural components.

#### **Property Maintenance - Plumbing Repair (PM-113-D) 6 Credit Hours, 200 Contact Hours**

An introduction to plumbing safety. Basic residential plumbing systems and use of various plumbing materials. Using, repairing and replacing PVC pipe and copper tubing including brazing and soldering. Faucet and toilet construction and parts. Repairing or replacing leaking or broken faucets, pipes, sinks, toilets, disposals, and sink traps, drain and hot water heater servicing. Training in building inspection for plumbing components also is included.

#### **Intro to Air Conditioning & Refrigeration (ACR-111-D) 6 Credit Hours, 200 Contact Hours**

The basic principles of air conditioning and refrigeration, the refrigeration cycle, construction and function of components and their relation to each other. Basic repair practices, refrigeration operation, trouble-shooting and servicing also are covered.

#### **Property Maintenance – Carpentry 2 (PM-212-D) 6 Credit Hours, 200 Contact Hours**

This course teaches material procurement, researching material, working within budgets, job cost estimation and presenting proposals; setting up scaffolding and use of fall arrest PPE gear needed for scaffold situations, the purpose of drop in ceilings as well as their installation. Flooring materials and installation is included. A review of roofing materials, common inspection, installation and repair techniques will be reviewed. Insulation, attic ventilation and the use of integrating solar energy into building design will be reviewed.

## Property Maintenance-Advanced Certificate – (2 Year)

Night Students Only (*Mon/Wed 6:30-9:30 p.m. or Tue/Thurs 6:30-9:30 p.m.*)

### First Year

#### First Term

PM111-C	Property Maintenance- Electrical Repair	3 Credits
---------	--	-----------

#### Second Term

PM112-C	Property Maintenance- Carpentry Repair	3 Credits
---------	---	-----------

#### Third Term

PM113-C	Property Maintenance- Plumbing Repair	3 Credits
---------	--	-----------

### Second Year (Option 1)

(If student's technical electives are not in HVAC)

#### First Term

ACR111-C	Intro to Air Conditioning & Refrigeration	3 Credits
----------	--	-----------

#### Second Term

BDH112-C	Basic Domestic Heating	3 Credits
----------	------------------------	-----------

#### Third Term

PM212-C	Property Maintenance- Carpentry Repair 2	<u>3 Credits</u>
---------	---	------------------

Total		18 Credits
-------	--	------------

### Second Year (Option 2)

(If student's technical electives are in HVAC)

#### First Term

WELD111-C	Intro to Welding	3 Credits
-----------	------------------	-----------

#### Second Term

IE112-C	Electricity 3	3 Credits
---------	---------------	-----------

#### Third Term

PM212-C	Property Maintenance- Carpentry Repair 2	<u>3 Credits</u>
---------	---	------------------

Total		18 Credits
-------	--	------------

# **Property Maintenance-Advanced Certificate – (2 Year)**

## **Course Descriptions**

### **Night Students Only**

#### **Property Maintenance - Electrical Repair (PM-111-C) 3 Credit Hours, 84 Contact Hours**

An introduction to electrical safety, including basic electrical theory, electrical terms, wiring symbols and basic residential electrical diagrams. Installation, repairing and/or replacing electrical circuits, regular receptacles, GFCI receptacles, circuit breakers, switches, lighting fixtures, fluorescent lighting and ceiling fans. Locating and repairing electrical shorts. Introduction to low-voltage systems and low-voltage-circuit design and function, as well as training in building inspection for electrical components.

#### **Property Maintenance - Carpentry Repair (PM-112-C) 3 Credit Hours, 84 Contact Hours**

An introduction to maintenance carpentry and general repair, including safety in use of hand and power tools. Using various carpentry materials, measuring, layout and cutting techniques. Use of adhesives and fasteners. Replacing or repairing dry wall, door locks, doors and windows, as well as training in building inspection for structural components.

#### **Property Maintenance - Plumbing Repair (PM-113-C) 3 Credit Hours, 84 Contact Hours**

An introduction to plumbing safety. Basic residential plumbing systems and use of various plumbing materials. Using, repairing and replacing PVC pipe and copper tubing including brazing and soldering. Faucet and toilet construction and parts. Repairing or replacing leaking or broken faucets, pipes, sinks, toilets, disposals, and sink traps, drain and hot water heater servicing. Training in building inspection for plumbing components also is included.

#### **Introduction to Air Conditioning & Refrigeration (ACR-111-C) 3 Credits, 84 Contact Hours**

The basic principles of air conditioning and refrigeration, the refrigeration cycle, construction and function of components and their relation to each other. Basic repair practices, refrigeration operation, trouble-shooting and servicing also are covered.

#### **Property Maintenance – Carpentry 2 (PM-212-C) 3 Credits, 84 Contact Hours**

This course teaches material procurement, researching material, working within budgets, job cost estimation and presenting proposals; setting up scaffolding and use of fall arrest PPE gear needed for scaffold situations, the purpose of drop in ceilings as well as their installation. Flooring materials and installation is included. A review of roofing materials, common inspection, installation and repair techniques will be reviewed. Insulation, attic ventilation and the use of integrating solar energy into building design will be reviewed.

# Welding

## Diploma – (1 Year)

Day Students Only (*Mon-Fri 8:30 a.m. – 3:30 p.m.*)

Welding classes are held in Welding Building at 475 N. Bellevue Blvd, 38105  
(1/5 mile from Main Campus)

### First Year

#### First Term

WELD111-D	Introduction to Welding	6 Credits
	*Technical Elective	6 Credits

#### Second Term

WELD112-D	Intermediate Welding	6 Credits
	*Technical Elective	6 Credits

#### Third Term

WELD113-D	Advanced Welding	6 Credits
	*Technical Elective	<u>6 Credits</u>
	<b>Total</b>	<b>36 Credits</b>

\*6 Credit Hour/200 Contact Hour Technical Electives are required outside of student major.  
Students should take electives that will best complement their career goals.

# **Welding**

## **Diploma – (1 Year)**

### **Course Descriptions**

#### **Day Students Only**

#### **Introduction to Welding (WELD111-D) 6 Credits, 200 Clock Hours**

This course introduces a student to welding with an emphasis on safety, proper equipment handling, and use of accessories, tools and good work habits. Students will apply basic welding math, symbols and print reading skills learned in this course as they learn basic Oxygen-Acetylene Cutting (OAC), Shielded Metal Arc welding (SMAW), Gas Metal Arc Welding (GMAW), and Flux Core Arc Welding (FCAW) principles and techniques.

#### **Intermediate Welding (WELD112-D) 6 Credits, 200 Clock Hours**

This course includes safety in the oxygen—acetylene process of welding and machinery safety. Shielded Metal Arc Welding (SMAW) in lab work continues and is followed with work in oxygen-acetylene welding.

#### **Advanced Welding (WELD113-D) 6 Credits, 200 Clock Hours**

This course includes Shielded Metal Arc Welding (SMAW), Gas Tungsten Arc Welding (GTAW), and Gas Metal Arc Welding (GMAW). As in all the courses, lab projects account for a large part of the learning process.

## **Welding**

### **Certificate – (1 Year)**

Night Students Only

*(Mon/Wed 6:30-9:30 p.m. or Tue/Thurs 6:30-9:30 p.m.)*

Welding classes are held in Welding Building at 475 N. Bellevue Blvd, 38105  
(1/5 mile from Main Campus)

### **First Year**

First Term

WELD111-C	Introduction to Welding	3 Credits
-----------	-------------------------	-----------

Second Term

WELD112-C	Intermediate Welding	3 Credits
-----------	----------------------	-----------

Third Term

WELD113-C	Advanced Welding	<u>3 Credits</u>
-----------	------------------	------------------

	<b>Total</b>	<b>9 Credits</b>
--	--------------	------------------

# **Welding**

## **Certificate – (1 Year)**

### **Course Descriptions**

#### **Night Students Only**

#### **Introduction to Welding (WELD111-C) 3 Credits, 87 Clock Hours**

This course introduces a student to welding with an emphasis on safety, proper equipment handling, and use of accessories, tools, and good work habits. Students will apply basic welding math, symbols and print reading skills learned in this course as they learn basic Oxygen-Acetylene Cutting (OAC), Shielded Metal Arc welding (SMAW), Gas Metal Arc Welding (GMAW), and Flux Core Arc Welding (FCAW) principles and techniques.

#### **Intermediate Welding (WELD112-C) 3 Credits, 87 Clock Hours**

This course includes safety in the oxygen-acetylene process of welding and machinery safety. Shielded Metal Arc Welding (SMAW) in lab work continues and is followed with work in oxygen-acetylene welding.

#### **Advanced Welding (WELD113-C) 3 Credits, 87 Clock Hours**

This course includes Shielded Metal Arc Welding (SMAW), Gas Tungsten Arc Welding (GTAW), and Gas Metal Arc Welding (GMAW). As in all the courses, lab projects account for a large part of the learning process.

## Welding – Advanced

### Associate of Applied Technology – (2 Year)

Day Students Only (*Mon-Fri 8:30 a.m. – 3:30 p.m.*)

Welding classes are held in Welding Building at 475 N. Bellevue Blvd, 38105  
(1/5 mile from Main Campus)

#### First Year

##### First Term

WELD111-D	Introduction to Welding	6 Credits
	*Technical Elective	6 Credits
	*General Ed Elective	3 Credits

##### Second Term

WELD112-D	Intermediate Welding	6 Credits
	*Technical Elective	6 Credits
	*General Ed Elective	3 Credits

##### Third Term

WELD113-D	Advanced Welding	6 Credits
	*Technical Elective	6 Credits
	*General Ed Elective	3 Credits

#### Second Year

##### First Term

WELD211-D	Pipe Welding	6 Credits
	*Technical Elective	6 Credits
	*General Ed Elective	3 Credits

##### Second Term

WELD212-D	Advanced Cutting	6 Credits
	*Technical Elective	6 Credits
	*General Ed Elective	3 Credits

##### Third Term

WELD213-D	Robotic Welding	6 Credits
	*Technical Elective	<u>6 Credits</u>

Total 87 Credits

\*6 Credit Hour/200 Contact Hour Technical Electives are required outside of student major.  
Students should take electives that will best complement their career goals.

\*See General Education Course Descriptions

# **Welding – Advanced**

## **Associate of Applied Technology – (2 Year)**

### **Course Descriptions**

#### **Day Students Only**

#### **Introduction to Welding (WELD111-D) 6 Credits, 200 Clock Hours**

This course introduces a student to welding with an emphasis on safety, proper equipment handling, and use of accessories, tools, and good work habits. Students will apply basic welding math, symbols and print reading skills learned in this course as they learn basic Oxygen-Acetylene Cutting (OAC), Shielded Metal Arc welding (SMAW), Gas Metal Arc Welding (GMAW), and Flux Core Arc Welding (FCAW) principles and techniques.

#### **Intermediate Welding (WELD112-D) 6 Credits, 200 Clock Hours**

This course includes safety in the oxygen-acetylene process of welding and machinery safety. Shielded Metal Arc Welding (SMAW) in lab work continues and is followed with work in oxygen-acetylene welding.

#### **Advanced Welding (WELD113-D) 6 Credits, 200 Clock Hours**

This course includes Shielded Metal Arc Welding (SMAW), Gas Tungsten Arc Welding (GTAW), and Gas Metal Arc Welding (GMAW). As in all the courses, lab projects account for a large part of the learning process.

#### **Pipe Welding (WELD211-D) 6 Credits, 200 Clock Hours**

For the advanced welder who wants to learn pipe welding. The course covers identifying and welding various pipe joints up to the 6G position. Pipe layout and design are covered along with basic pipe welding codes and procedures. Students will be using SMAW, GMAW or GTAW to complete this course along with a review of basic welding and safety.

#### **Advanced Cutting (WELD212-D) 6 Credits, 200 Clock Hours**

Designed to teach basic CNC plasma cutting skills for today's advanced industry using the Torchmate cutting table. Students learn CNC software, programming and file formats to create basic to elaborate designs as well as their own design concepts. This is a very intensive course for the advanced student wanting to get into automated fabrication.

#### **Robotic Welding (WELD213-D) 6 Credits, 200 Clock Hours**

An introduction to robotic welding as applies to manufacturing. Students complete projects to develop fabricator techniques used in industry.

## **Welding – Advanced**

### **Diploma – (2 Year)**

Day Students Only (*Mon-Fri 8:30 a.m. – 3:30 p.m.*)

Welding classes are held in Welding Building at 475 N. Bellevue Blvd, 38105  
(1/5 mile from Main Campus)

### **First Year**

#### **First Term**

<b>WELD111-D</b>	<b>Introduction to Welding</b>	<b>6 Credits</b>
	<b>*Technical Elective</b>	<b>6 Credits</b>

#### **Second Term**

<b>WELD112-D</b>	<b>Intermediate Welding</b>	<b>6 Credits</b>
	<b>*Technical Elective</b>	<b>6 Credits</b>

#### **Third Term**

<b>WELD113-D</b>	<b>Advanced Welding</b>	<b>6 Credits</b>
	<b>*Technical Elective</b>	<b>6 Credits</b>

### **Second Year**

#### **First Term**

<b>WELD211-D</b>	<b>Pipe Welding</b>	<b>6 Credits</b>
	<b>*Technical Elective</b>	<b>6 Credits</b>

#### **Second Term**

<b>WELD212-D</b>	<b>Advanced Cutting</b>	<b>6 Credits</b>
	<b>*Technical Elective</b>	<b>6 Credits</b>

#### **Third Term**

<b>WELD213-D</b>	<b>Robotic Welding</b>	<b>6 Credits</b>
	<b>*Technical Elective</b>	<b><u>6 Credits</u></b>

**Total**                      **72 Credits**

**\*6 Credit Hour/200 Contact Hour Technical Electives are required outside of student major. Students should take electives that will best complement their career goals.**

# **Welding – Advanced Diploma – (2 Year) Course Descriptions Day Students Only**

## **Introduction to Welding (WELD111-D) 6 Credits, 200 Clock Hours**

This course introduces a student to welding with an emphasis on safety, proper equipment handling, and use of accessories, tools, and good work habits. Students will apply basic welding math, symbols and print reading skills learned in this course as they learn basic Oxygen-Acetylene Cutting (OAC), Shielded Metal Arc welding (SMAW), Gas Metal Arc Welding (GMAW), and Flux Core Arc Welding (FCAW) principles and techniques.

## **Intermediate Welding (WELD112-D) 6 Credits, 200 Clock Hours**

This course includes safety in the oxygen-acetylene process of welding and machinery safety. Shielded Metal Arc Welding (SMAW) in lab work continues and is followed with work in oxygen-acetylene welding.

## **Advanced Welding (WELD113-D) 6 Credits, 200 Clock Hours**

This course includes Shielded Metal Arc Welding (SMAW), Gas Tungsten Arc Welding (GTAW), and Gas Metal Arc Welding (GMAW). As in all the courses, lab projects account for a large part of the learning process.

## **Pipe Welding (WELD211-D) 6 Credits, 200 Clock Hours**

For the advanced welder who wants to learn pipe welding, this course covers identifying and welding various pipe joints up to the 6G position. Pipe layout and design are covered along with basic pipe welding codes and procedures. Students will be using SMAW, GMAW or GTAW to complete this course along with a review of basic welding and safety.

## **Advanced Cutting (WELD212-D) 6 Credits, 200 Clock Hours**

Designed to teach basic CNC plasma cutting skills for today's advanced industry using the Torchmate cutting table. Students learn CNC software, programming and file formats to create basic to elaborate designs as well as their own design concepts. This is a very intensive course for the advanced student wanting to get into automated fabrication.

## **Robotic Welding (WELD213-D) 6 Credits, 200 Clock Hours**

An introduction to robotic welding as applies to manufacturing. Students complete projects to develop fabricator techniques used in industry.

## **Welding – Advanced Certificate – (2 Year)**

**Night Students Only**

*(Mon/Wed 6:30-9:30 p.m. or Tue/Thurs 6:30-9:30 p.m.)*

Welding classes are held in Welding Building at 475 N. Bellevue Blvd, 38105  
(1/5 mile from Main Campus)

### **First Year**

**First Term**

**WELD111-C Introduction to Welding 3 Credits**

**Second Term**

**WELD112-C Intermediate Welding 3 Credits**

**Third Term**

**WELD113-C Advanced Welding 3 Credits**

### **Second Year**

**First Term**

**WELD211-C Pipe Welding 3 Credits**

**Second Term**

**WELD212-C Advanced Cutting 3 Credits**

**Third Term**

**WELD213-C Robotic Welding 3 Credits**

**Total 18 Credits**

# **Welding – Advanced Certificate – (2 Year) Course Descriptions**

## **Night Students Only**

### **Introduction to Welding (WELD111-C) 3 Credits, 87 Clock Hours**

This course introduces a student to welding with an emphasis on safety, proper equipment handling, and use of accessories, tools and good work habits. Students will apply basic welding math, symbols and print reading skills learned in this course as they learn basic Oxygen-Acetylene Cutting (OAC), Shielded Metal Arc welding (SMAW), Gas Metal Arc Welding (GMAW), and Flux Core Arc Welding (FCAW) principles and techniques.

### **Intermediate Welding (WELD112-C) 3 Credits, 87 Clock Hours**

This course includes safety in the oxygen—acetylene process of welding and machinery safety. Shielded Metal Arc Welding (SMAW) in lab work continues and is followed with work in oxygen-acetylene welding.

### **Advanced Welding (WELD113-C) 3 Credits, 87 Clock Hours**

This course includes Shielded Metal Arc Welding (SMAW), Gas Tungsten Arc Welding (GTAW), and Gas Metal Arc Welding (GMAW). As in all the courses, lab projects account for a large part of the learning process.

### **Pipe Welding (WELD211-C) 3 Credits, 87 Clock Hours**

For the advanced welder who wants to learn pipe welding, this course covers identifying and welding various pipe joints up to the 6G position. Pipe layout and design are covered along with basic pipe welding codes and procedures. Students will be using SMAW, GMAW or GTAW to complete this course along with a review of basic welding and safety.

### **Advanced Cutting (WELD212-C) 3 Credits, 87 Clock Hours**

Designed to teach basic CNC plasma cutting skills for today's advanced industry using the Torchmate cutting table. Students learn CNC software, programming and file formats to create basic to elaborate designs as well as their own design concepts. This is a very intensive course for the advanced student wanting to get into automated fabrication.

### **Robotic Welding (WELD213-C) 3 Credits, 87 Clock Hours**

An introduction to robotic welding as applies to manufacturing. Students complete projects to develop fabricator techniques used in industry.

## GENERAL EDUCATION COURSE DESCRIPTIONS

Three (3) credit hour courses are offered as a part of the 15 credit hours of general education required for the Associate of Applied Technology Degrees.

### **Professional Development (GE-102) 3 Credit Hours**

This course provides the student with performance and employment techniques needed to succeed in today's workplace.

### **Technical Writing (GE-103) 3 Credit Hours**

This course is designed to provide the student with the writing skills needed for today's workplace. Effective sentence construction, persuasive letters, writing proposals, collecting and analyzing data and developing reports are included.

### **Technical Physics (GE-104) 3 Credit Hours**

This course provides the student with the understanding of the laws of physics and how to apply technical physics to selected rules.

### **Math for Technicians (GE-105) 3 Credit Hours**

This course covers mathematical skills required in the technical trades and how to apply these tools.

### **Intro to Psychology (GE-106) 3 Credit Hours**

This course is a concise introduction to the science of psychology and the application of psychological principles to the workplace. Students will survey principles of learning and personality and how this applies to training and management.

### **Introduction to Computer Science (GE-107) 3 Credit Hours**

Computer system technologies, Windows-based operating systems; creating, storing and sharing files; Word, Excel, and other software as needed and efficient use of programs.