

1810 Gillespie Way |Suite 104 El Cajon, CA 92020 atacollege.edu | 619.596.2766

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#### **Approval Disclosure Statement**

ATA College, formerly Advanced Training Associates, is a private institution approved to operate by the California Bureau for Private Postsecondary Education. Approval to operate means the institution is compliant with the minimum standards contained in the California Private Postsecondary Education Act of 2009 (as amended) and Division 7.5 of Title 5 of the California Code of Regulations. ATA College has achieved national accreditation from the Council on Occupational Education (COE). This accrediting agency is recognized by the United States Department of Education (USDE). COE has also approved the following programs:

DEGREE PROGRAMS	Clock Hours	Weeks	Semester Credit Hour	Format
Health Information Technician, AAS	1260	60	64	Т
Medical Assistant, AAS	1240	60	64	Т
Software Development & Programming, AAT	1200	60	64	T/H/DE
Associate of Science in Criminal Justice	1200	60	71	T/H/DE
APPROVED PROGRAMS				
Health Information Technician	760	34	36	T/H/DE*
HVAC Technician II	900	40	45	T/H/DE
Medical Assistant	760	34	33	Т
Software Development & Programming	720	36	37	T/DE
Criminal Justice & Public Safety	720	36	40	T/H/DE
APPROVED PROGRAMS LESS THAN 400 HOURS				
Electrocardiogram Technician	60	3	3	Т
Fiber Optics for Professionals	125	7	7	T

(T)Traditional/ (H)Hybrid/ (DE) Distance Education

Traditional Format: Students meet in person Monday through Friday during their scheduled class times.

**Hybrid Format:** Students attend classes virtually Mondays and Wednesday during their scheduled class times. All assignments must be completed within 24 hours to be marked present. Students must attend classes in person at least 51% of the time.

**Distance Education**: Students attend classes virtually Monday through Friday during their scheduled class times, or they may view lectures on their own time. All assignments must be completed within 24 hours to be marked present. Students in the HVAC Technician II class who chose Distance Education must be present for all labs to successfully complete the program. \*The Externship portion of this program must be completed in-person at an approved workplace.

Students who successfully complete a course of study are awarded an appropriate diploma. Prospective enrollees are encouraged to visit the physical facilities of the school and discuss personal, educational, and occupational plans with the school's personnel before enrolling or signing enrollment agreements. Programs do not have a cumulative final test or examination, and Licensure is not required for the completion of any program.

Students who successfully complete the Software Development & Programming Associate of Applied Technology Program, the Health Information Technician Associate of Applied Science, the Medical Assistant Associate of Applied Science Degree program, or the Associate of Science in Criminal Justice program will be awarded an associate degree.

ATA College is authorized for Workforce Innovation and Opportunity Act (WIOA) voucher training. ATA College is approved for veteran's benefits under Title 38 United States Code (U.S.C.) The school is certified and authorized by the Veterans Administration to provide training services to veterans entitled to educational benefits. The School has available private payment plans, and it trains various insurance companies for the vocational rehabilitation of their clients.

All information in the content of this School catalog is current and correct and is certified as true by Henry Marentes, President and CEO, hmarentes@atacollege.edu, 619-596-2766.



## **Hours of Operation**

The School's business hours are Monday through Friday 8:30 a.m. until 9:30 p.m. For additional information on the School, contact the Admissions Department.

## **Legal Control**

ATA College is a private, postsecondary school. It is owned by Educational Ventures, LLC, a Delaware Corporation. The School complies with all local, state, and federal laws and regulations.

#### **Academic Calendar**

The current catalog is effective January 1, 2025, through December 31, 2025. **Observed Holidays:** 

New Year's Day
Martin Luther King, Jr.
Presidents Day
Memorial Day
Juneteenth
Independence Day
Labor Day
Veteran Day
Thanksgiving & Day After
Winter Break (12/22/25 to 12/26/25)

Registration is continuous. Classes start monthly; please see addendum for scheduled start and end dates.

#### **Institutional Mission Statement**

Our mission at ATA College is to provide diploma and associate degree training for entry-level positions in specialized fields. Our goal is to assist individuals in learning new skills and/or enhancing previously obtained skills, through higher education. We strive to fulfill both the needs of the individual seeking employment and our community. We are committed to providing a quality education that instills core values that will develop work ethics, professionalism, honor, and integrity, giving our graduates a competitive edge through any economic condition.

## **Policy and Program Modification**

In keeping with the school philosophy of an immediate response to the needs of students and future employers, the school reserves the right to modify the course content, structure, and schedule without additional charges to the student and within the regulatory guidelines. The school reserves the right to amend the catalog as needed.

#### **Facilities**

Classroom instruction is traditional, hybrid and online. All classes are held at 1810 Gillespie Way, Suite 104, El Cajon, CA 92020. The maximum class size depends on the classes and the module. In general, lab classes and lecture classes are a maximum of 20:1. ATA College Campus is approximately 5324 square feet and includes three instructional classrooms, three lab classrooms, five administrative offices, a library and conference room, and student break room.

#### Classroom configurations are as follows:

**Software Development Classroom:** The classroom is approximately 377 square feet. Six desks are arranged in the classroom with each desk accommodating two students. The classroom is equipped with computers for student use. All computers have internet access, applicable software, and mounted monitors. The instructor can broadcast videos over the local network that students can view on individual computers.

**HVAC Technician Classroom:** The classroom is approximately 377 square feet. Three desks and five work benches are arranged in the classroom with each desk accommodating two to three students.

**HVAC Technician Lab**: The HVAC Lab is approximately 352 square feet and is used for all hands-on labs and contains the equipment and supplies needed for demonstration and practical use.

**Fiber Lab:** The Fiber Classroom is used for fiber optics lectures and all hands-on labs. The fiber lab classroom is approximately 256 square feet. Two 6'x 2.5' tables capable of accommodating 8 students each are arranged depending on which lab is being performed.

**Medical Assistant Classroom:** The medical classroom is used for all medical assistant lectures. The classroom is approximately 352 square feet. Six large tables accommodating three students each give a total capacity of 18 students. The classroom can hold an additional table to accommodate two more students for a total of 20 students if needed.

**Medical Lab Classroom:** The medical lab is used for all hands-on labs for the medical assistant program. The classroom is approximately 408 square feet. The lab can be easily rearranged for the demonstration of multiple procedures.

*Criminal Justice Classroom:* The classroom is approximately 377 square feet. Six desks are arranged in the classroom with each desk accommodating two students. The classroom is equipped with computers for student use. All computers have internet access, applicable software, and mounted monitors. The instructor can broadcast videos over the local network that students can view on individual computers.

*Library:* The Library is approximately 134 square feet. Library resources are available for use by students and instructors, as well as current magazine publications and medical books. Resources are accessible in the library on campus during hours of operation, Monday through Friday, 8:00 a.m. to 9:30 p.m. All materials are to remain on campus during use and are not allowed to be removed from the campus.

*Virtual Environment:* Classes that are held via distance education utilize the Microsoft Teams communication platform. This platform allows for live video lectures, recorded meetings, interactive discussion sessions, instant feedback, and direct communication with instructors and classmates. This virtual environment is also available for instruction for traditional classroom delivery. Lecture material, quizzes, exams, and additional curriculum are available to all students via the Moodle Learning Management System. Students in hybrid or distance education programs are required to attend class in-person several times per week, this ensures students are able to meet with their instructors often and never have a weekday break greater than 24 hours.

#### **Administrative Personnel**

#### **Henry Marentes**

#### Chief Executive Officer | President

B.A. Information Systems, National University

20 years of experience in information technology, strategic planning, and product management

#### **Judith Hernandez**

#### **Chief Operating Officer**

Master of Business Administration, National University B.S. in Microbiology, San Diego State University 20 Years' Customer Support/Lifesciences

#### **Valerie Phillips**

#### School Director/Vice President of Operations

30 Years of experience in Financial Aid, School Administration & Management California Lifetime Certificate of Authorization for School Director

#### **Nick Fleetwood**

#### **Director of Compliance**

M.Ed. in Educational Leadership, Concordia University – Portland B.S. in Biology, San Diego State University 14 Years of experience in school administration U.S. Navy Hospital Corpsman, 10 years of experience

#### **Dionne Simpson**

#### Financial Aid Officer | Registrar

B.A. in Business, San Diego State University15 Years of experience in school administration and financial aid

#### **Josette Bocobo**

#### **Career Services Coordinator**

Four Years of experience in school administration

#### **Kheysi Ramirez**

#### **Enrollment Advisor**

Three Years of experience in school administration

#### **Andrea Nichols**

#### **Enrollment Advisor**

11 Years of experience in school administration

#### **Emma Phillips**

#### **Administrative Assistant**

10 Years of experience in business and medical administration

## **Faculty**

#### **Full-Time Instructors**

# James Kyle, MHA Director of Education | Allied Health Programs Instructor | General Education Instructor

M.S. in Health Care Administration/Human Resource, Stevens-Henagar College B.A. in Psychology, National University B.S. in Healthcare Admin, CCSD Navy Hospital Corpsman, Retired 13 Years of experience in School Administration

#### **Joaquin Coffey**

## Telecommunications | Fiber Optics Instructor

U.S. Navy Electronics Technician, Retired FCC GROL/Radar Endorsement, Certified Associate 24 Years of experience of an instructor

# Georgina Kay Kluttz, BSN, RN Director of Nursing Programs | Allied Health Programs Instructor | General Education

Bachelor of Science in Nursing, South University A.S. in Nursing, Horry Georgetown Technical College

# Zachary Brock HVAC Instructor

Six years' experience in HVAC HVAC Technician Certification US Navy 10 Years experience Systems Engineer

#### **Part Time Instructors**

## Alejandra Marentes Lab Assistant

Registered Nurse Six years experience

#### **Rumer Reyes**

#### **Medical Assistant Substitute Instructor**

George Washington University Retired Chief Hospital Corpsman 24 Years experience

## Michael Miranda HVAC Instructor

HVAC Certificate, UEI College Six years' experience in HVAC

### Gregory Bierman HVAC Instructor

Facility Manager Certificate
University of California San Diegoh
26 years' experience in HVAC

## Clyde Castillo

# Software Development & Programming Instructor

B.A. San Diego State University26 Years of experience in Technology, SoftwareDevelopment and Programming.

## **Rodney Van**

#### **Criminal Justice Instructor**

B.S. in Criminal Justice, San Diego State University Probation Officer, San Diego County Probation Department 20 years, retired

#### **Adjunct Instructors**

# Sherri Savage General Education |

M.S. in Education, Texas A&M

## **ADMISSIONS**

## **General Admission Requirements**

Prospective students who have a high school diploma or a recognized equivalency certificate (GED) are required to provide a copy of high school diploma, official transcript or GED certification or fill out a transcript request.

## **Degree Program Admission Requirements**

A high school diploma or GED is required for admission to the degree program.

## **Application Procedure**

Qualified applicants who desire to enroll in one of the programs offered must apply in person. The Admissions Department is open from 8:30 a.m. to 5:30 p.m., Monday through Friday. A member of our Admissions Team will guide the applicant through the following steps:

- Choosing from the courses available
- Touring our facilities and equipment
- Arranging for applicable test(s) if any

#### The admissions process is comprised of the following steps:

- Complete an evaluation interview with a member of our Admission Team.
- Tour the facilities
- Compete the ATA College Application
- Meet with a Financial Aid Representative
- Complete all required enrollment paperwork
- Attend an orientation prior to class start

#### Restarts

Students wishing to restart after withdrawing from the school may do so without penalty and will be assessed tuition as a proportion of the total program cost for only the modules the student needs to complete. Any prior balances must be cleared before the student is permitted to re-enter.

## **Orientation and Requirements for Admission**

Incoming students will be provided with a comprehensive orientation on school policies, drug and alcohol prevention, and program information prior to entrance into regularly scheduled classes. At the orientation, students will be provided with an opportunity to discuss the information described in the catalog, program handbook, school policies, program requirements, dress code, attendance requirements, library resources, etc. The orientation allows enrollees to become acquainted with fellow classmates, faculty, and staff of ATA College.

## **Information Changes or Updates**

Any new information sensitive to enrollment and completion of programs will be discussed at orientation on or before the start of class.

## **ATA College Acceptance of Credit**

## **Military Students**

ATA College will give credit to military personnel, both active duty and veterans, based upon the level of training, schooling and rate/MOS (Military Occupation Specialty) as it relates to specific skill competencies (experiential learning). This policy is in accordance with the Montgomery GI Bill and the Post 9/11 GI Bill for military personnel. There is no charge for this service.

#### **Civilian Transfer Students**

Additionally, ATA College will give credit to any student that previously attended any institution that is regionally or nationally accredited. Credit will be given based on the level of schooling and credits the student earned at the previous institution and as it relates to the program the student wishes to enroll in at ATA College. The school will evaluate the credits earned and convert those into clock hours, prorate the tuition, and charge the student the difference. Credits must have been earned within the last 5 years.

#### Example:

If the student previously earned 7.32 credits or 125 clock hours at a regionally or nationally accredited institution and enrolls in a program at ATA College that is 720 clock hours. The school will base the tuition charge on the 595 remaining clock hours.

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\$14,490.00 tuition divided by 720 clock hours =  $$20.12 \times 595$  clock hours = \$11,974.37 total tuition.

ATA College does not accept hours or credit earned through challenge examinations or achievement tests or experiential credit for civilian students.

#### **Transfer To and From Other Schools**

Units earned in our programs in most cases will probably not be transferable to any other college or university. For example, if you started in our school as a freshman, you will still be a freshman if you enter another college or university at some time in the future, even though you have earned units here at our school. In addition, if you earn a degree or diploma in any of our programs, in most cases it will probably not serve as a basis for obtaining a higher-level degree at another college or university.

## **Transfer Between Programs**

If a student desires a transfer from one program to another, no credit is given if the programs are different in nature. Programs that are similar in nature will be evaluated by the School Director for possible credit.

## **Articulation Agreements**

This Institution has not entered any transfer or articulation agreements with any other college or university. However, ATA College does have an Educational Alliance with Grand Canyon University (GCU), credits earned in our associate degree programs are accepted toward bachelor's degree programs at GCU.

# Notice Concerning Transferability of Credits and Credentials Earned at our Institution

The transferability of credits you earn at ATA College is at the complete discretion of an institution to which you may seek to transfer. Acceptance of the degree or diploma you earn in any one of the ATA College programs is also at the complete discretion of the institution to which you may seek to transfer. If the credits, degree or diploma you earn at ATA College are not accepted at the institution to which you seek to transfer, you may be required to repeat some or all of your coursework at that institution. For this reason, you should make certain that your attendance at ATA College will meet your educational goals. This may

include contacting an institution to which you may seek to transfer after attending ATA College to determine if your credits, degree, or diploma will transfer.

# Credit for courses at our School that lead to the Degree Programs – Military Students

ATA College will give credit for all individual diploma programs and General Education courses that are applicable, earned at other institutions to all military and veterans of the United States Armed Forces. In some circumstances, credit may be given for work experience.

ATA College does not accept hours or credit earned through challenge examinations or achievement tests.

## **Transcripts**

ATA College will provide a transcript of the student's academic record upon written request by the student. An official copy will be mailed to the appropriate person and/or school. An unofficial copy can be secured and given directly to a student.

## **Transcript Fee**

Graduated students are provided with one official transcript, if requesting an additional official transcript, copy of diploma or Ability to Benefit (ATB) test score you will be assessed a non-refundable \$7.00 fee. Request for a duplicate diploma or degree will be assessed at a \$20.00 fee.

### **Foreign Students**

ATA College does not offer visa services to prospective students from other countries or English language services. ATA College does not offer English as a Second Language instruction. All instruction occurs in English. English language proficiency is documented by:

- 1. The admissions interview
- 2. Receipt of prior education documentation
- 3. Take Admissions test, if required. ATA College uses the Wonderlic (SLE)

## STUDENT POLICIES AND SERVICES

#### **Student Orientation**

During orientation, a school administrator will familiarize the student with the school facilities, services, grading policies, graduation requirements, library resources, etc. as described in this catalog and student handbook.

#### **Hours**

#### **Instruction Hours:**

8:30 AM to 12:30, Monday through Friday 12:30 PM to 4:30 PM, Monday through Friday (HVAC II Only) 5:30 PM to 9:30 PM, Monday through Friday

#### **Office Hours:**

8:30 AM to 5:30 PM, Monday through Friday 5:30 PM to 7:00 PM, Monday through Thursday by appointment

Classes are offered continually on a cyclical basis, usually starting on selected Mondays. Legal holidays are observed. School closes for winter break for one week during the Christmas holiday season. The school provides special consideration for holidays of all religious beliefs. Appropriate arrangements must be made with the School Director. A complete listing of module starts, holidays, etc., is provided as an addendum.

## **Maintenance of School Facility**

Care and adherence to infection control protocol (health professions) and equipment and environmental protection are necessary responsibilities of the workplaces. To prepare for these requirements, the following procedures must be followed:

- Smoking is only permitted in outdoor designated smoking areas.
- Students must maintain a clean, organized, workstation always. When leaving the area, all electrical, including computers must be turned off.
- Food and drinks are prohibited in the classrooms.
- Students misusing the equipment and instrumental devices may be subject to dismissal and may be billed for damaged equipment.
- Accidents and/or breakdowns must be reported immediately to the student's instructor.

#### Housing

ATA College does not assume responsibility for student housing, does not have dormitory facilities under its control, nor offers student housing assistance. According to forrent.com for El Cajon, CA, rental properties start at approximately \$1,800 per month.

## Medical, Dental, Psychological Care

Successful progression through a program of study requires sufficient sleep, exercise, and a proper diet. If needed, medical and/or dental appointments should be made after school hours. If a student needs personal psychological counseling, the School Director will provide a listing of services in the community.

#### **Child Care**

ATA College is not equipped or properly staffed to provide childcare services for enrollees.

#### **Current Student Information**

It is important that the school be notified of any change in residence or telephone numbers. Current and accurate personal information is necessary if an emergency should occur.

## **Visitors**

Parents, spouses, prospective employers, etc. are cordially invited to visit the school at any time, but with appropriate notice to the school. Special arrangements will be made for groups. Anyone who is disruptive to the smooth operation of the school may be asked to leave the premises immediately. Students are not allowed to bring children into the classrooms/laboratories without approval from the administration.

### **Telephone**

Emergency calls will be transmitted to the student when received. Cell phone usage should be limited to break times and outside the classroom in the student lounge.

#### **Photo Release**

At ATA College, students will provide absolute rights and permission to use photographic portraits, pictures, or videos of them in character form, for advertising or any other lawful purpose whatsoever.

#### **Academic Advisement**

All students are provided with personal assistance regarding program requirements and scheduling. In addition, individual assistance, tutoring, and advising are readily available to students with special academic difficulties. There is no charge for tutoring and all students are urged to take advantage of this valuable benefit. Students are encouraged to request an appointment with their instructor immediately if any scholastic problems arise. The administration welcomes any suggestions as to ways in which any aspect of the school can be improved. Suggestions should be directed to the School Director.

## **Voter Registration**

Voter registration may be completed at <a href="https://registertovote.ca.gov/">https://registertovote.ca.gov/</a>

## **Resource Center/Library**

The ATA College Resource Center offers publications and services directly related to all course work offered by the school. Print acquisitions such as books, magazines, newsletters, and internet access are made available to both students and faculty. In addition, there are public libraries located within commuting distance.

#### **Lost and Found**

It is important not to carry valuables such as large sums of money, jewelry, credit cards, etc. to class. Due to the nature of the laboratory classes, valuables cannot always be secured within a classroom. If something is lost, contact the administrative assistant at the front desk.

#### **Dress Code**

Creating a professional image requires dressing professionally for the career of your choice. This concept begins in school. Throughout your educational experiences, prospective employers will be visiting and sometimes observing you.

**Students:** Casual business attire is required. Shorts, beachwear, jeans, see-through fabric, low necklines, hemlines more than 4 inches above the knee, baggy trousers, and flip-flops are not appropriate attire for school.

## **Rules and Regulations for Conduct**

Please maintain the following behaviors, as they are acceptable professional conduct for career professionals:

- 1. Accept assigned duties and responsibilities.
- 2. Demonstrate initiative and productivity.
- 3. Demonstrate sensitivity, compassion, and a caring attitude towards your peers.
- 4. Demonstrate a cooperative, supportive team attitude toward your peers, instructor, and directors.
- 5. Treat people as you would like to be treated.
- 6. Maintain professional grooming and personal hygiene always.
- 7. Be aware of the following restrictions:
  - Sexual harassment or any type of harassment, horseplay, or threat of any kind—verbal, physical
    or visual—will not be tolerated, particularly against students in protected classes. These classes
    include, but are not limited to, race, color religion, sex, age, sexual orientation, national origin or
    ancestry, disability, medical condition, marital status, veteran status, or any other protected
    status defined by law.
  - Any physical violence will be reported to the local sheriff. Weapons are not permitted on campus.
  - Use of profanity, insubordination, dishonesty, and violation of safety rules are unacceptable behaviors and will not be tolerated.
  - Use or sale of non-prescription drug/s, alcohol will not be tolerated on the school premises and/or surrounding structures.
  - ATA College maintains a smoke-free environment.
  - Food or drink is NOT permitted in the classrooms, unless designated by the School Director

Violation of the rules of conduct outlined in this catalog may lead to dismissal from school and/or probation. All disciplinary matters will come before the administration, which will review the complaint, interview the person(s) involved, and decide of the action. Results may include dismissal of the charge, dismissal of the student, probation, or suspension for a specified period. The finding will become part of the student's permanent file, possibly affecting a recommendation from ATA College to future employers. ATA College reserves the right to dismiss any student for whom it feels continuation would be a detriment to the student, fellow students, and/or the school.

## **Substance Abuse Prevention Policy**

As a matter of policy, ATA College has adopted and implemented a program that prohibits the manufacture and unlawful possession, use or distribution of illicit drugs and alcohol by students and employees on its property and at any school activity. Any violation of this policy will result in appropriate disciplinary actions, up to and including expulsion, even for a first offense. Where it is apparent that a violation of the law has occurred, the appropriate law enforcement authorities will be notified.

Drug use and alcohol abuse have harmed society through major health and safety problems and contributed to the deterioration of the nuclear family. The administration, staff, and faculty are dedicated to providing education, awareness, treatment referrals, along with the legally mandated reporting and criminal sanctions. You will receive a comprehensive handbook during orientation outlining the regulation for the Drug-Free Schools and Campuses Act that was published in August 1990. This handbook includes a written drug policy, information on health risks, legal penalties and sanctions, referral services, and treatment options.

## **Equal Opportunity**

ATA College is committed to the full utilization of all human resources and to a policy of equal opportunity. Our Company will not discriminate against applicants or students for enrollment on any legally recognized basis including, but not limited to, veteran status, race, color, religion, gender, sexual orientation, marital status, national origin, physical or mental disability and/or age.

In accordance with stipulations of Affirmative Action, Education Ventures, LLC is required to state the following facts:

- We are in compliance with Executive Order 11246
- The Vice President of Operations is the affirmative action officer.
- Educational Ventures, LLC follows California Department of Fair Employment and Housing Requirements (2 California Code of Regulation, Section 8103)

You may discuss equal opportunity related questions with the Vice President of Operations.

### **Americans with Disabilities Act**

Our school is committed to providing equal opportunities to our students that are otherwise qualified individuals with disabilities, which includes providing reasonable accommodation whenever necessary. In general, it is your responsibility to notify the school of the need for accommodation. Upon doing so, you may be asked by the School Director for your input or the type of accommodation you believe may be necessary or the functional limitations caused by your disability. Also, when appropriate, we may ask you to provide additional information from your physician or other medical or rehabilitation professionals.

## **Student Responsibilities and Rights**

#### Responsibilities

- 1. In addition to the requirements described under sections on attendance, satisfactory progress, etc. in this catalog, students are expected to follow standards of conduct and ethical consideration generally found in the professional workplace. Refer to *Rules and Regulations for Conduct* in this catalog.
- 2. Read and understand all forms that you are asked to sign and keep copies of them.
- 3. It is the student's responsibility to compare options and choose the school he/she wishes to attend. Tuition must be paid regardless of any future complaints or problems, unless discharged by a court of law.
- 4. Repay all loans on time and in full.

#### Rights

- 1. Know what financing is available. For all loans you receive, you have the right to know the total amount that must be repaid, the monthly payment amount, the late penalty charge, the payback procedures, the length of time for repaying the loan, and when repayment is to begin.
- 2. Know the criteria for satisfactory progress and when you are not meeting these criteria.
- 3. You may stop school at any time and receive a refund for the part of the course you did not take (if payment has been made). The refund policy is in this catalog and also described in your enrollment agreement.

If you have unresolved complaints after following the grievance procedures, you may contact the Bureau for Private Postsecondary Education or the Council on Occupation Education. Read the section on grievance procedures carefully.

#### **Placement Services**

The School provides placement assistance to all our graduates. Although we cannot make job promises or guarantees, the Career Services Department will assist graduates in finding employment. Students will be given assistance in career preparedness including how to prepare a professional resume, fill out employment applications, and use effective interviewing techniques. Our Career Services Department will assist in identifying jobs that fit each student's qualifications.

#### **Student Grievance Procedures**

Occasionally, a problem may arise between you and an instructor, or with some aspect of the School. Students are encouraged to verbally communicate their concerns to the appropriate person. It is very important that this problem be resolved. The following are the steps you should take to resolve this problem:

Step One: The student should request an appointment with the instructor or person involved.

**Step Two:** If Step One has not resolved the problem, the student must notify the School Director in writing within 2 business days after the incident occurs. The "Incident Report" can be obtained from the Director.

**Step Three:** If the student has followed the above steps, the School Director will call a grievance committee meeting within a week of receipt of the "Incident Report" form. The following steps are followed:

- a. All involved parties must complete an "Incident Report" form.
- b. All documentation must be received prior to the meeting.
- c. The membership of the grievance committee members can consist of, but is not limited to the School Director, Financial Aid Officer, the instructor, and/or appropriate program head.
- d. All persons involved with the incident will also be in attendance.
- e. The student and all other parties involved will present their views. Minutes will be taken.
- f. After all such information is presented, the committee will meet in the absence of those involved to discuss the matter.
- g. The decision of the committee will be reported to all interested parties.

A student or any member of the public may file a complaint about this institution with the Bureau for Private Postsecondary Education by calling 888.370.7589 toll-free or by completing a complaint form, which can be obtained on the bureau's Internet Web site www.bppe.ca.gov.

Schools accredited by the Council on Occupational Education must have a procedure and operational plan for handling student complaints. If a student does not feel that the school has adequately addressed a complaint or concern, the student may consider contacting the accrediting Council. All complaints considered by the Council must be in written form, with permission from the complainant(s) for the Council to forward a copy of the complaint to the School for a response. The complainant(s) will be kept informed as to the status of the complaint as well as the final resolution by the Council. Please direct all inquiries to:

The Council on Occupational Education 7840 Roswell Road, Building 300, Suite 325 Atlanta, GA 30350 www.council.org 770.396.3898

A copy of the Council's Complaint Form is available at the school and may be obtained by contacting the Vice President of Operations at the School.

Students may also receive comparable program information related to tuition and program length by contacting the Council on Occupational Education, at the address listed above.

#### **Consumer Information**

Any questions a student may have regarding this catalog that have not been satisfactorily answered by the institution may be directed to the Bureau for Private Postsecondary Education at: 1747 N Market Blvd. Suite 225, Sacramento, CA 95834, www.bppe.ca.gov, toll-free telephone number (888) 370-7589 or by fax (916) 263-1897.

As a prospective student, you are encouraged to review this catalog prior to signing an enrollment agreement. You are also encouraged to review the School Performance Fact Sheet, which must be provided to you prior to signing an enrollment agreement.

ATA College has never filed for bankruptcy petition, operated as a debtor in possession or had a petition of bankruptcy filed against it under Federal law.

The Office of Student Assistance and Relief is available to support prospective students, currents students, or past students of private postsecondary education institutions in making informed decisions, understating their rights, and navigating available service and relief options. The office may be reached by calling (888) 370-7580 or visiting www.osar.bppe.ca.gov

#### **Veterans**

ATA College is approved by the California State Approving Agency to enroll veterans and other eligible persons who qualify for VA Benefits. For information or for resolution on payment problems the veteran should call the Department of Veteran Affairs toll free nationwide number 888-442-4551.

The Certifying Official for ATA College is the School Director. Additionally, they are the point of contact for covered individuals and family members seeking assistance with:

- Academic Counseling.
- o Financial Counseling.
- Disability Counseling.
- Other information regarding completing a course of education at the education institution.

## **Books and Supplies**

The costs of books are included in the total program cost. Educational Supplies and lab fee charges are listed on your enrollment agreement. Other supplies such as notebooks, note paper, highlighters, pens, pencils, and erasers, etc. must be provided by the student.

#### **Student Identification Cards**

Students are issued an ID card at no cost. The ID card is designed to be worn with the provided school lanyard during class hours. Having or wearing an ID card is required. Students will be charged \$10.00 USD for replacement cards.

#### Attendance

Consistent attendance is essential to the overall effectiveness of the training a student receives at ATA College. Attendance is as important as learning, as future employers emphasize punctuality and attendance as top job requirements. A student is required to attend all scheduled classes regularly and punctually.

ATA College recognizes that there are times when a student is unable to attend class, arrives late or leaves early. The attendance policy allows for these circumstances, while ensuring that each student attends class a sufficient amount of time to master the subject material. A student will be required to make up absences if his/her attendance falls below 90%. Failure to make up missed days will affect financial aid eligibility and may result in dismissal from school. Unsatisfactory progress and automatic termination from the program will result from missing ten (10) consecutive school days and not returning on the eleventh (11<sup>th</sup>) day of absence or extending training time beyond 150% of the program total.

#### **Attendance Probation**

Attendance Probation: Criteria for Placement Process	A student will be required to make up absences if he or she is below 90% attendance. The student will be on attendance probation until his/her attendance is at or above 90%. The student must make up his/her absence and bring his/her attendance above 90% by the end of the next module. A student may be placed on probation for a maximum of two modules in an academic year before dismissal is recommended.
Consecutive Days Absent:	A student who has missed ten (10) consecutive school days and does not return on the eleventh (11th) day will be terminated from school on that day.
Effect of Not Meeting Attendance Requirement at End of Probationary Period:	If 90% attendance is not achieved at the conclusion of the probationary period, the student will be terminated.
Attendance Appeal Process:	Students may appeal termination if extenuating circumstances exist. Appeals must be made in writing to the School Director. The director will decide the date of re-entry, if applicable.

## **Re-entry Policy**

Students who have been terminated for violating the attendance policy may re-enter as soon as their appeal is processed and approved by the School Director.

#### **Leave of Absence**

Students may be granted one leave of absence (LOA) per 12-month period for certain specific and acceptable reasons. All LOAs must be in writing please see administration. If a student fails to return on the scheduled return date, he/she shall be terminated from the training program. One subsequent leave of absence may be granted if the leave of absence does not exceed 30 days and the School determines that it is necessary due to unforeseen circumstances. Subsequent leaves of absence may be granted for jury duty, military reasons, or circumstances covered under the Family and Medical Leave Act of 1993. The school must document the reason for each subsequent leave of absence.

#### Effects of Leave of Absence on Satisfactory Academic Progress

Students who are contemplating a leave of absence should be cautioned that one or more of the following factors may affect their eligibility to graduate within the maximum program completion time.

- Students returning from a leave of absence are not guaranteed that the module required to
  maintain the normal progression in their training program will be available at the time of their
  return from the leave of absence.
- They may have to wait for the appropriate module to be offered, which may extend their leave of absence.
- They may be required to repeat the entire module from which they elected to withdraw prior to receiving a final grade.
- Financial aid may be affected.

A student can request a Leave of Absence for up to 180 days in any 12-month period. Requesting a Leave of Absence does not result in additional charges. Written requests for leave of absence will be considered at the discretion of the school administration except in the circumstance of military students that are called to duty; in that circumstance the Leave of Absence will be approved.

Servicemembers and reservists are readmitted to their programs of study when the student is called to duty. For shorter periods of absences, a student will have the opportunity to make up classes and course work and or repeat the module they missed at no additional charge.

## **Grading System**

Evaluation of student achievement will be based on meeting the objectives for each class. At the beginning of each class, the instructor will provide the student with a syllabus identifying the objectives and grade determination criteria. Students must achieve a cumulative grade point average of at least 2.0 (73%). A student who fails a course is permitted to continue in her/his studies if satisfactory progress is maintained. Any course that is failed must be repeated and passed.

#### **Grade Point**

The following system of grade points is used to evaluate a student's level of achievement:

Α	94% – 100% 4.00	С	73% – 76.99% 2.00
A-	90% – 93.99% 3.70	C-	70% – 72.99% 1.70
B+	87% – 89.99% 3.30	D+	67% – 69.99% 1.30
В	83% – 86.99% 3.00	D	63% - 66.99% 1.00
B-	80% – 82.99% 2.70	D-	60% - 62.99% 0.70
C+	77% – 79.99% 2.30	F	0% - 59.99% 0.00

#### Incomplete

An incomplete grade may be given for incomplete class assignments and/or examinations only with permission from the instructor. The incomplete grade will be converted to an F grade if the incomplete is not made up within one week after the following module begins. (If a student does not make up incomplete course work, then the incomplete grade will be converted to a Fail grade.)

#### Make-up work

Absences that exceed 10% of class time must be made up. Students will be required to make up all assignments, examinations or other work missed as the result of any absence. Upon returning to school, the student must immediately arrange to meet with the instructor regarding missed requirements. If the instructor approves, the student must make up assignments within five (5) days and examinations on the day the student returns from an absence. The instructor may assign additional outside assignments if deemed necessary. All arrangements are subject to approval by the School Director.

## Requirements and Grading Policies for Externship

For programs requiring an externship, the School will provide an externship site upon completion of the classroom portion of the program. Policies and grading of the externship are described in the Program Handbook. Days, hours, dress code, responsibilities, etc. are dependent on the requirements of the extern facility. During the externship, each student will be evaluated in the areas of professional performance, work habits, initiative, etc. Criteria for grading are described in the Program Handbook. If the student is unable to reach minimum competency at the extern facility, she/he will be required to return to school for remedial assistance and/or serve additional externship hours.

## Satisfactory Academic Progress Requirement Academic progress

All students must maintain satisfactory academic progress (SAP) in order to remain eligible to continue as students in the School. All students are considered to be making satisfactory progress when they begin school and during any probationary period. Satisfactory progress includes, but is not limited to meeting minimum standards for grades, work projects, externship, etc.

#### Requirements

Students must show satisfactory academic progress. In order to maintain satisfactory academic progress, students must:

- Achieve a cumulative grade percent average (GPA) of at least 73 percent (on a scale of 0-100 percent) or be on academic probation; students on academic probation must attend mandatory tutoring. There is no charge for this service
- Progress at a satisfactory rate toward completion of their programs; and
- Complete the training programs within 1 1/2 times the published program length

Students whose cumulative GPA falls below 73 percent are notified that they are being placed on academic probation, which will begin at the start of the next module. Students are considered to be making satisfactory progress while on probation status.

# **Unsatisfactory Academic and Progress Requirement Probationary status**

Academic Probation: Criteria for Placement Process	A student will be notified by the Registrar and placed on academic probation when he or she cannot meet the above-described GPA for one module. For Financial Aid purposes SAP is measured at the end of each payment period and a student placed on academic probation will be considered to be making satisfactory progress. If the GPA is unsatisfactory for an additional module, the student will be placed on a second probation and allowed a maximum of two months to bring his/her cumulative grade point average to 73 or be terminated.
Academic Probation Removal: Time period Effects of meeting/not meeting Times placed	Removal of academic probation requires that a student maintain satisfactory academic progress for at least one module. A student may be placed on academic probation a maximum of two times in an academic year before dismissal occurs.
Academic Appeal Process:	Students who are placed on a probation and/or termination status for failure to maintain satisfactory academic progress may appeal. A written statement describing the extenuating circumstances must be submitted to the School Director. The director will determine the date of re-entry, if applicable.

#### Maximum Program Completion Time

Students are expected to complete their program within the defined maximum program completion time, which should not exceed 150% times the normal time frame. This campus defines the normal time frame as the length of time it would take a student to complete the total program semester credit hours or clock hours according to the Enrollment Agreement.

#### **Unsatisfactory grades**

Courses with grades of F or I are considered unsatisfactory, and the credits are not successfully completed. These courses must be repeated within 150% of the normal time frame.

#### **Module Retake Policy**

A student may repeat a module only once when an unsatisfactory grade has been attained. There is no charge for this service. The higher of the two grades will be counted for purposes of calculating the student's GPA.

## **Summary of Termination/Reinstatement Policies**

Those who fail to maintain the required policies described under the sections related to satisfactory academic/attendance progress requirements, leave of absence, conduct, dress code, substance abuse and/or financial obligations included within this catalog may be subject to termination.

Examples include, but are not limited to, the following:

- Violation of the attendance policy
- Failure to maintain satisfactory academic progress
- Violation of personal conduct standards
- Inability to meet financial obligations to the School

## **Reinstatement Policy**

Students who have been terminated for failing to maintain satisfactory academic progress may be reinstated through the appeal process. However, students are not eligible for financial aid during this appeals process. Upon reinstatement, the student will be placed on probation. At the end of the first module after reinstatement, the following standards must be achieved: a cumulative GPA of 2.0 (73%) and 90% cumulative attendance.

### Withdrawal Policy

In order to withdraw, the student must complete an official withdrawal form and file it with the School Director. A student will be dropped after ten (10) consecutive absences if a withdrawal form is not filed.

### **Appeals Process**

Re-admission to the school following withdrawal for any reason will be at the discretion of the School's Academic Committee (School Director and Faculty). A student may petition in writing for reinstatement within one year of dismissal. The petition must be filed at least two weeks before the beginning of a module. The Committee will review the student's previous academic admission records and his/her current situation in making a decision for reinstatement. The student will then be notified of the Committee's decision. Students accepted for re-admission will be entitled to the same rights and privileges and are subject to the same regulations as any student. Students will not be entitled to appeal if they are terminated for exceeding the maximum program completion length.

## **Student Records**

Student records, which include grades, attendance, prior education and training, personal achievements, etc. are kept for a period of not less than five (5) years on the school premises. Academic transcripts are kept permanently.

## Family Educational Rights and Privacy Act of 1974, as amended

ATA College complies with the Family Educational Rights and Privacy Act (FERPA), which provides students certain rights related to their educational records. The following is a description of those rights:

• The right to inspect and review the student's educational records within 45 days of the day the School receives a written request for access: Students should submit to the School President written requests that identify the record (s) they wish to inspect. The School official will make arrangements for access and notify the student of the time and place where the records may be inspected. If the records are not maintained by the school official to whom the request was submitted, that official shall advise the student of the correct official to whom the request should be addressed.

- The right to request the amendment of the student's educational records that the student believes are inaccurate or misleading. Student may ask the school to amend a record that he/she believes is inaccurate or misleading. The student should write the school official responsible for the record, clearly identify the part of the record they want changed, and specify why it is inaccurate or misleading. If the School decides not to amend the record as requested by the student, the school will notify the student of the decision and advise the student of his or her right to a hearing regarding the request for amendment. Additional information regarding the hearing procedures will be provided to the student when notified of the right to a hearing.
- The right to consent to disclosures of personally identifiable information contained in the student's education records, except to the extent that FERPA authorizes disclosure without consent: One exception, which permits disclosure without consent, is disclosure to School officials with legitimate educational interests. A School official is a person employed by the School in an administrative, supervisory, academic and research, or support staff position (including law enforcement unit personnel and health staff). A person or company with whom the School has contracted (such as an attorney, auditor, or collection agent); a person serving on the Board of Trustees; a student serving on an official committee, such as a disciplinary or grievance committee, or assisting another school official in performing his or her tasks. A school official has a legitimate educational interest if the official needs to review an educational record in order to fulfill his or her professional responsibility. Upon request, the school discloses educational records without consent to officials of another school in which a student seeks or intends to enroll.
- Directory information is information that may be unconditionally released to third parties by the school
  without the consent of the student unless the student specifically requests that the information not be
  released. The school request students to present such requests in writing within 10 days of the date of
  enrollment. Directory information includes the student's name, address(s), telephone number(s), birth
  date and place, program undertaken, dates of attendance, and certificate or diploma awarded.
- The right to file a complaint with the U.S. Department of Education concerning alleged failures by the School to comply with the requirements of FERPA: The name and address of the Office that administers FERPA is Family Policy Compliance Office, Department of Education, 600 Independence Avenue, SW, Washington, DC 20202-4605.

#### **Graduation Requirements**

Success is dependent upon the student's individual efforts, abilities, and application to the requirements of the school.

To be eligible for graduation, student must:

- Complete all required classroom modules with a cumulative grade point average of at least 2.0.
- Meet the grade and other program requirements for specific modules (if applicable)
- Meet the Satisfactory Progress requirement.
- Meet all financial or other obligations to the school.

ATA College does not have a cumulative final test or examination required for the completion of any program.

Graduation ceremonies will typically be scheduled in the fall of each year. Graduates will be notified, in advance, by email of the upcoming events.

## **Verification of Students Identity**

During the enrollment process, all students are required to present, in person, a State or Federal issued photo identification card and Social Security number card to verify their identity. Students attending class

on campus will not incur a fee for any process related to identification verification or personal data collection. Online students may incur a fee of \$20.00 to verify their identity.

## **Diploma and Degrees**

When requirements are met, a diploma is awarded to graduates of approved programs.

Upon successful completion of the Medical Assistant Associate of Applied Science Program, students will be awarded an Associate of Applied Science Degree.

Upon successful completion of the Health Information Technician Associate of Applied Science Program, students will be awarded an Associate of Applied Science Degree.

Upon successful completion of the Software Development & Programming Associate of Applied Technology Degree Program, students will be awarded an Associate of Applied Technology Degree.

Upon successful competition of the Associate of Science in Criminal Justice program, students will be awarded an Associates of Science Degree.

## **Transcripts**

There will be no transcripts issued until all financial or other obligations are met.

## Veterans Benefits and Transition Act of 2018, Section 103

For any students using VA Education Chapter 33 (Post-9/11 GI Bill®) or Chapter 31 (Vocational Rehabilitation) benefits, while payment to the institution is pending from the VA (up to 90 days), the school will not:

- Prevent their enrollment.
- Assess a late penalty fee.
- Require they secure alternative or additional funding.
- Deny their access to any resources (access to classes, libraries, or other institutional facilities) available to other students who have satisfied their tuition and fee bills to the institution.

To qualify for this provision, such students are required to:

- Produce a VA Certificate of Eligibility or an eBenefits GI Bill Statement of Benefits by the first day of class.
- Provide the school a request to be certified.
- Provide any additional information needed to properly certify the enrollment as described in the school's institutional policies..

"GI Bill®" is a registered trademark of the U.S. Department of Veterans Affairs (VA).

## **FINANCIAL POLICIES**

## ATA College | Effective for all terms through 31 Dec 2025

#### **Tuition and Fees**

Because of the many changes that occur daily in business and education, it is impossible to guarantee longstanding particulars. The school, therefore, reserves the right to modify the tuition.

#### **ALLIED HEALTH PROGRAMS**

Program	Registration Fee Non-Refundable	Student Tuition Recovery Fund Non- Refundable	Media Services, Supplies and Lab Fees	Tuition Payment Period 1	Tuition Payment Period 2	*Total Cost
Health Information Technician	\$100.00	\$0	\$0	\$8,195.00	\$8,195.00	\$16,490.00
Medical Assistant	\$100.00	\$0	\$0	\$8,445.00	\$8,445.00	\$16,990.00
Electrocardiogram Technician	\$100.00	\$0	\$50.00	\$1300.00	N/A	\$1,450.00

#### **TECHNOLOGY PROGRAMS**

Software Development & Programming	\$100.00	\$0	\$0	\$8,195.00	\$8,195.00	\$16,490.00
Fiber Optics for Professionals	\$100.00	\$0	\$250.00	\$6,995.00	N/A	\$7,345.00

Program	Registration Fee Non-Refundable	Student Tuition Recovery Fund Non-Refundable	Media Services, Supplies and Lab Fees	1 <sup>st</sup> Term Tuition Payment Period 1	1 <sup>st</sup> Term Tuition Payment Period 2	2 <sup>nd</sup> Term Tuition Payment Period 1	2 <sup>nd</sup> Term Tuition Payment Period 2	*Total Cost
HVAC Technician II	\$200.00**	\$0	\$0	\$7,245.00	\$7,245.00	\$1,805.00	\$1,805.00	\$18,300.00

#### **CRIMINAL JUSTICE PROGRAMS**

nal Justice & Public Safety \$100.00	\$0	\$0	\$8,195.00	\$8,195.00	\$16,490.00
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<sup>\*</sup> Estimated charges for the period of attendance and the entire program.

DEGREE PROGRAMS	Registration Fee Non- Refundable	Student Tuition Recovery Fund Non- Refundable	Media Services, Supplies and Lab Fees	1 <sup>st</sup> Term Tuition Payment Period 1	1 <sup>st</sup> Term Tuition Payment Period 2	2 <sup>nd</sup> Term Tuition Payment Period 1	2 <sup>nd</sup> Term Tuition Payment Period 2	*Total Cost
Medical Assistant Associate of Applied Science	\$200.00**	\$0	\$0	\$8,445.00	\$8,445.00	\$3,650.00	\$3,650.00	\$24,390.00
Health Information Technician Associate of Applied Science	\$200.00**	\$0	\$0	\$8,195.00	\$8,195.00	\$3,650.00	\$3,650.00	\$23,890.00
Software Development & Programming Associate of Applied Technology	\$200.00**	\$0	\$0	\$8,195.00	\$8,195.00	\$3,650.00	\$3,650.00	\$23,890.00
Associate of Science in Criminal Justice	\$200.00**	\$0	\$0	\$8,195.00	\$8,195.00	\$3,650.00	\$3,650.00	\$23,890.00

<sup>\*</sup> Estimated charges for the period of attendance and the entire program.

<sup>\*\*</sup>Students are charged a \$100 registration fee each academic year, programs over 900 clock hours are two academic years.

#### **Additional Fees**

The following list of additional certifications and memberships are available to ATA College students; fees\* are not included in the tuition. Arrangements for payment should be made prior to enrollment along with the fees listed on the enrollment agreement.

<sup>\*</sup>Fees subject to change based on association's fees.

The Fiber Optic Association (FOA) Exam Fees:					
Certified Premises Cabling Technician (CPCT)	\$60.00 (FOA)				
Certified Fiber to The Home Technician (CFOS/H)	\$60.00 (FOA)				
Certified Fiber Optic Technician (CFOT)	\$60.00 (FOA)				

## **Student Tuition Recovery Fund (STRF)**

#### As of April 1, 2024, The Bureau for Private Postsecondary Education has suspended the STRF fees.

The State of California established the Student Tuition Recovery Fund (STRF) to relieve or mitigate economic loss suffered by a student in an educational program at a qualifying institution, who is or was a California resident while enrolled, or was enrolled in a residency program, if the student enrolled in the institution, prepaid tuition, and suffered an economic loss. Unless relieved of the obligation to do so, you must pay the state-imposed assessment for the STRF, or it must be paid on your behalf, if you are a student in an educational program, who is a California resident, or are enrolled in a residency program, and prepay all or part of your tuition.

You are not eligible for protection from the STRF and you are not required to pay the STRF assessment, if you are not a California resident, or are not enrolled in a residency program."

(b) In addition to the statement required under subdivision (a) of this section, a qualifying institution shall include the following statement in its school catalog:

"It is important that you keep copies of your enrollment agreement, financial aid documents, receipts, or any other information that documents the amount paid to the school. Questions regarding the STRF may be directed to the Bureau for Private Postsecondary Education, 1747 North Market Blvd., Suite 225, Sacramento, California, 95834, (916) 431-6959 or (888) 370-7589.

To be eligible for STRF, you must be a California resident or are enrolled in a residency program, prepaid tuition, paid or deemed to have paid the STRF assessment, and suffered an economic loss as a result of any of the following:

- 1. The institution, a location of the institution, or an educational program offered by the institution was closed or discontinued, and you did not choose to participate in a teach-out plan approved by the Bureau or did not complete a chosen teach-out plan approved by the Bureau.
- 2. You were enrolled at an institution or a location of the institution within the 120 day period before the closure of the institution or location of the institution, or were enrolled in an educational program within the 120 day period before the program was discontinued.
- 3. You were enrolled at an institution or a location of the institution more than 120 days before the closure of the institution or location of the institution, in an educational program offered by the institution as to which the Bureau determined there was a significant decline in the quality or value of the program more than 120 days before closure.
- 4. The institution has been ordered to pay a refund by the Bureau but has failed to do so.
- 5. The institution has failed to pay or reimburse loan proceeds under a federal student loan program as required by law, or has failed to pay or reimburse proceeds received by the institution in excess of tuition and other costs.

- 6. You have been awarded restitution, a refund, or other monetary award by an arbitrator or court, based on a violation of this chapter by an institution or representative of an institution, but have been unable to collect the award from the institution.
- 7. You sought legal counsel that resulted in the cancellation of one or more of your student loans and have an invoice for services rendered and evidence of the cancellation of the student loan or loans.

To qualify for STRF reimbursement, the application must be received within four (4) years from the date of the action or event that made the student eligible for recovery from STRF.

A student whose loan is revived by a loan holder or debt collector after a period of noncollection may, at any time, file a written application for recovery from STRF for the debt that would have otherwise been eligible for recovery. If it has been more than four (4) years since the action or event that made the student eligible, the student must have filed a written application for recovery within the original four (4) year period, unless the period has been extended by another act of law.

However, no claim can be paid to any student without a social security number or a taxpayer identification number.

#### **Financial Aid Assistance**

ATA College participates in financial aid programs to assist students in paying for their tuition and fees. Preparing for a lifelong career requires not only a commitment of time and effort, but also a financial investment in a quality educational program. Many people feel that they cannot afford the tuition, books and time required for formal training. The following financial aid programs are available to students at ATA College, subject to individual qualifications. Federal Financial Aid is available for Medical Assistant, Health Information Technician, Medical Assistant AAS, Health Information Technician AAS, Information Systems Technology, Software Development & Programming, Information Systems & Communications Technology AAT, Criminal Justice and AS in Criminal Justice and Software Development & Programming AAT and HVAC Technician II programs only.

PELL Federal Pell Grant

PLUS Federal Parent Loan for Undergraduate Students
FSEOG Federal Supplemental Educational Opportunity Grant
FEDERAL STUDENT LOANS\* Direct Subsidized and Unsubsidized Loan Programs

WIOA Workforce Innovation and Opportunity Act

REHAB Private Rehabilitation Benefits

TA Tuition Assistance for Military Personnel

GI Bill<sup>®</sup> Veterans Benefits

Students seeking financial aid must first complete the Free Application for Federal Student Aid application (FAFSA). The school's financial aid representative will use this application to determine the student's needs and assist with deciding what programs best serve the student. If a student withdraws from school, an adjustment in the amount owed may be made, subject to the school's refund policy. If a student has received financial aid in excess of what he/she owes to the college, these funds must be returned to the federal financial aid program, if applicable.

<sup>\*(1)</sup> federal student loans are required by law to provide a range of flexible repayment options, including, but not limited to, income-based repayment and income-contingent repayment plans, and loan forgiveness benefits, which other student loans are not required to provide; and (2) federal direct loans are available to students regardless of income.

As a participant in federal financial aid assistance, ATA College maintains all required consumer information on the school website which can be found at: <a href="https://atacollege.edu/consumer-information/">https://atacollege.edu/consumer-information/</a>

## **Verification Policy**

If a student's application is selected for review in a process called "Verification" by the Department of Education, the student may be required to submit additional documentation to the Financial Aid Department. Once a student is notified to provide additional documentation, the required information must be provided to the School within 45 days of notification. Failure to do so may result in suspension from school. A student who purposely gives false or misleading information to the Financial Aid Office, may be reported to the Office of Inspector General.

## **Student Budget**

In addition to the direct costs of education, it is important to develop a budget to identify other financial obligations that a student may incur when attending school. These expenses may include transportation, childcare, personal expenses, etc. The school's financial aid representative will assist students with this budget.

#### **Tuition and Fees**

The Enrollment Agreement obligates the student and the School for the entire program of instruction. The student's financial obligations will be calculated in accordance with the School's refund policy in the contract and this school catalog. Registration and tuition fees for each program are listed on page 23. An institutional catalog is available at no charge and will be provided to each enrollee prior to enrollment. Tuition is due in full at the beginning of each payment period. The school will work with each student to determine the best financial arrangement to meet his/her obligation for tuition. The school provides a voluntary prepayment plan to students and their families to help reduce the costs upon entry into training. Details are available through the financial aid representative.

The following payment plan is available to those who do not qualify for total financial assistance sufficient to cover the amount of tuition and fees:

• 10% down payment on the total program charges, followed by equal monthly installments during the student's enrollment period.

## **Cancellation of Agreement and Withdrawal from School**

You have the right to cancel agreement for a program of instruction, without any penalty or obligations, through attendance at the first-class session or the seventh calendar day after enrollment, whichever is later. After the end of the cancellation period, you also have the right to stop school at any time and you have the right to receive a pro rata refund if you have completed 60 percent or less of the scheduled hours in the current payment period in your program through the last day of attendance.

- Cancellation may occur when the student provides a written notice of cancellation at the following address: ATA College 1810 Gillespie Way, Suite 104, El Cajon, CA 92020. This can be done by mail or by hand delivery.
- The written notice of cancellation, if sent by mail, is effective when deposited in the mail properly addressed with proper postage.
- The written notice of cancellation need not take any particular form and, however expressed, it
  is effective if it shows that the student no longer wishes to be bound by the Enrollment
  Agreement.
- If the Enrollment Agreement is cancelled the school will refund the student any money he/she paid. If a student withdraws after the cancellation period, a deduction for equipment not returned in good condition would apply.

### Withdrawal from the Program and Refund Policy

You may withdraw from the school at any time after the cancellation period (described above) and receive a pro rata refund if you have completed 60 percent or less of the scheduled hours in the current payment period in your program through the last day of attendance. The refund will be less a registration or administration fee, and less any deduction for equipment not returned in good condition, within 45 days of withdrawal. If the student has completed more than 60% of the period of attendance for which the student was charged, the tuition is considered earned and the student will receive no refund.

For the purpose of determining a refund under this section, a student shall be deemed to have withdrawn from a program of instruction when any of the following occurs:

- The student notifies the institution of the student's withdrawal or as of the date of the student's withdrawal, whichever is later
- The institution terminates the student's enrollment for failure to maintain satisfactory progress; failure to abide by the rules and regulations of the institution; absences in excess of maximum set forth by the institution; and/or failure to meet financial obligations to the school
- The student has failed to attend class for 10 days
- The student fails to return from a leave of absence

For the purpose of determining the amount of the refund, the date of the student's withdrawal shall be deemed the last date of recorded attendance. The amount owed equals the daily charge for the program (total institutional charge, minus non-refundable fees, divided by the number of days in the program), multiplied by the number of days scheduled to attend, prior to withdrawal. For the purpose of determining when the refund must be paid, the student shall be deemed to have withdrawn at the end of 10 days.

For programs beyond the current "payment period," if you withdraw prior to the next payment period, all charges collected for the next period will be refunded. If any portion of the tuition was paid from the proceeds of a loan or third party, the refund shall be sent to the lender, third party or, if appropriate, state or federal agency that guaranteed or reinsured the loan. If any balance remains on the loan, the student is responsible to repay the full amount of the loan plus interest. If any amount of the refund is in excess of the unpaid balance of the loan, it shall be first used to repay any student financial aid programs from which the student received benefits, in proportion to the amount of the benefits received, and any remaining amount shall be paid to the student.

If you did not receive all of the funds that you earned, you may be due a post-withdrawal disbursement. If your post-withdrawal disbursement includes loan funds, your school must get your permission before it can disburse them. You may choose to decline some or all of the loan funds so that you don't incur additional debt. Your school may automatically use all or a portion of your post-withdrawal disbursement of grant funds for tuition, fees, and room and board charges (as contracted with the school). The school needs your permission to use the post-withdrawal grant disbursement for all other school charges. If you do not give your permission (some schools ask for this when you enroll), you will be offered the funds. However, it may be in your best interest to allow the school to keep the funds to reduce your debt at the school.

There are some Title IV funds that you were scheduled to receive that cannot be disbursed to you once you withdraw because of other eligibility requirements. For example, if you are a first-time, first-year undergraduate student and you have not completed the first 30 days of your program before you withdraw, you will not receive any Direct Loan funds that you would have received had you remained enrolled past the 30th day.

If you receive (or your school or parent receive on your behalf) excess Title IV program funds that must be returned, your school must return a portion of the excess equal to the lesser of:

- 1. your institutional charges multiplied by the unearned percentage of your funds, or
- 2. the entire amount of excess funds.

The school must return this amount even if it didn't keep this amount of your Title IV program funds. If your school is not required to return all of the excess funds, you must return the remaining amount. Any loan funds that you must return, you (or your parent for a Direct PLUS Loan) repay in accordance with the terms of the promissory note. That is, you make scheduled payments to the holder of the loan over a period of time.

Any amount of unearned grant funds that you must return is called an overpayment. The maximum amount of a grant overpayment that you must repay is half of the grant funds you received or were scheduled to receive. You do not have to repay a grant overpayment if the original amount of the overpayment is \$50 or less. You must make arrangements with your school or the Department of Education to return the unearned grant funds.

The requirements for Title IV program funds when you withdraw are separate from any refund policy that your school may have. Therefore, you may still owe funds to the school to cover unpaid institutional charges. Your school may also charge you for any Title IV program funds that the school was required to return. If you don't already know your school's refund policy, you should ask your school for a copy. Your school can also provide you with the requirements and procedures for officially withdrawing from school.

If you have questions about your Title IV program funds, you can call the Federal Student Aid Information Center at 1-800-4-FEDAID (1-800-433-3243). TTY users may call 1-800-730-8913. Information is also available on Student Aid on the Web at <a href="https://www.studentaid.ed.gov">www.studentaid.ed.gov</a>.

#### **Return of Tuition Assistance Funds**

Unearned TA will be refunded based on pro rata or proportional basis through 60% of the period for which the TA funds were provided. When a servicemember stops attending due to military service the school will work with the student for solutions so there is no debt due to returned portions of TA.

The institutes courses are taught in 20-day mods or four weeks. The instructional week is Monday through Friday.

Example of return of unearned TA:

Day 1-5	100% return	Day 9 55%
Day 6	70%	Day 10 50%
Day 7	65%	Day 11 45%
Day 8	60%	Day 12 40%
		Day 13-20 0% return

## **Return of Title IV Funds Policy**

Effective 10/7/2000, all financial aid (Title IV) recipients who withdraw and have completed 60% or less of the payment period for which they have been charged, are subject to the new federal refund regulations per 34 CFR 668, 682 & 685, published on November 1, 1999.

Federal regulations state that the amount of a Title IV refund is based on the percentage of Title IV funds earned by the student at the time of withdrawal. In order to determine whether Title IV funds must be returned, the school must calculate the following:

- 1. To determine the percentage of the payment period completed, the number of days attended in the payment period is divided by the total days in the payment period. Days = calendar days for purposes of this formula, and therefore include weekends and holidays. Only scheduled breaks of 5 days or more and approved leaves of absence are excluded
- 2. The net amount of Title IV funds disbursed that could have been disbursed for the payment period is multiplied by the percentage of the payment period completed. The result is the amount of earned Title IV aid
- 3. The earned aid is subtracted from the aid that was actually disbursed to, or on behalf of the student
- 4. The institution will return the lesser of the total earned aid or the unearned institutional charges for the payment period
- 5. Unearned aid is allocated back to the Title IV programs in the following order as specified by law:
- 6. Federal Direct Unsubsidized Stafford Loan Program
- 7. Federal Direct Subsidized Stafford Loan Program
- 8. Federal PLUS Program
- 9. If excess funds remain after repaying all outstanding loan amounts, the remaining excess shall be credited in the following order:
  - a. Federal Pell Grant Program
  - b. Federal SEOG Program
  - c. Other assistance awarded, under this title, for which return of funds is required

For the purpose of determining the amount you owe for the time you attended, you shall be deemed to have withdrawn from the course when any of the following occurs:

- You notify the Registrar's office of your withdrawal
- The school terminates your enrollment
- You fail to attend classes for ten (10) consecutive school days and do not return the eleventh (11th) day

## Refunds when due are made without requiring a request from the student within 45 days.

If any portion of your tuition was paid from the proceeds of a loan, then the refund will be sent to the lender or to the agency that guaranteed the loan, if any. Any remaining amount of refund will first be used to repay any student financial aid programs from which you received benefits, in proportion to the amount of the benefits received. Any remaining amount will be paid to you.

**NOTE:** After the institution has allocated the unearned aid, any amount owed by the <u>student</u> to a grant program is reduced by 50%. Unearned loan funds received by the student are paid back as per the terms of the borrower's promissory note.

#### **Determination of the Withdrawal Date**

The student's withdrawal is the last date of academic attendance as determined by the institution from its attendance records. The withdrawal date for a student who does not return from an approved leave of absence is set retroactively to the last date of attendance, as determined by the institution's attendance records.

**NOTE:** A student who is on an approved leave of absence retains in-school status for purposes of Title IV loans. However, the student should be aware that if he or she does not return from a leave of absence, some or all of the grace period of the loan could have been used up, as the withdrawal date is set retroactively.

#### Federal Refund Requirements vs. State Refund Requirements

In addition to the federal refund requirements for Title IV recipients, the institution is required to calculate a California State Calculation, which is based on clock hours for the entire period of enrollment. If a student attends over 60% of the period of enrollment, he/she will owe 100% of the tuition. If a student attends less than 60%, a refund may be due. The refund for all students who withdraw, regardless of whether or not the student received Title IV funds, will be calculated as per California regulations, as required by the Bureau of Private Post-Secondary Education. However, the federal formula for return of Title IV funds may result in a larger refund than the state refund policy, in which case the institution and the student must return the sum which results in the larger of the two calculations to the appropriate Title IV program. Therefore, the student may, after Title IV funds are returned, owe a balance to the institution. Any credit balance remaining after refunding to the Title IV programs will be returned to the Direct Loan Programs in order to reduce the loan debt for the student. If the refund results in reducing the student's loan to zero, any remaining amount will be paid to the student.

## **Unsatisfactory Financial Progress Requirement**

Violation of any of the conditions set forth in the signed Enrollment Agreement may lead to dismissal from school and/or probation. Failure to meet all financial obligations to the School may also lead to dismissal from school and/or probation.

## **Financial Aid Student Rights**

Students have the right to know:

- Types of Financial Aid available at ATA College.
- The basis for eligibility and the process of fulfilling those needs.
- When Financial Aid has been awarded and the conditions to which they are agreeing.
- The refund policy.

This information is available within this catalog and through the financial aid department.

## **Reinstatement of Financial Aid Eligibility**

Financial aid recipients who lose their eligibility for financial benefits due to Unsatisfactory Progress or other forms of disciplinary actions may have their eligibility reinstated. Conditions for reinstatement include, but are not limited to, the achievement of academic standing consistent with graduation requirements. The student must request reinstatement. The President, School Director, and financial aid representative will review such requests after academic advisement with the student.

If a student receives a loan to pay for their educational program, the student will have the responsibility to repay the full amount of the loan plus interest, less the amount of any refund. If a student has received federal student financial aid funds, the student is entitled to a refund of the funds not paid from federal student financial aid programs.

## **Gainful Employment:**

ATA College prepares graduates for employment. The job classifications for our programs using the United States Department of Labor's Standard Occupation Classification (SOC) Codes are listed below:

Criminal Justice & Public Safety 33-3000 Law Enforcement Workers

Criminal Justice, Associate of Science 33-3000 Law Enforcement Workers

Health Information Technician 29-2071, Medical Records and Health Information Technicians

Health Information Technician, AAS 29-2071 Medical Records and Health Information Technicians

HVAC Technician II 49-9021 Heating Air Conditioning & Refrigeration Mechanics & Installers

Fiber Optics for Professionals 49-9052 Telecommunications Line Installers & Repairers

Medical Assistant 319092 Medical Assistant

Medical Assistant, AAS 319092 Medical Assistant

Software Development & Programing 15-1250 Software & Web Developers, Programmers, & Testers

Software Development & Programing, AAT 1 5-1250 Software & Web Developers, Programmers, & Testers

## **ACADEMICS**

## **Faculty and Curriculum**

The Faculty members of ATA College are selected not only for their education, credentials, work experience, but also for their dedication, enthusiasm and ability to motivate students to their highest level of academic achievement. Students are urged to meet with their instructor for assistance when needed. Curricula for all programs have been designed, not only to provide career skills, but to also qualify students for immediate employment opportunities in a relatively short period of time.

# **Allied Health Programs**

PROGRAM	CLOCK HOURS	FORMAT	PAGE
Health Information Technician	760	T/H/DE*	34
Medical Assistant	760	Т	36
Electrocardiogram Technician	60	Т	38

(**T**)Traditional: fully in-person, (**H**)Hybrid: At least 51% of the program must be completed on-campus, (**DE**) Distance Education: part or all of the program may be available virtually.

<sup>\*</sup>The Externship portion of this program must be completed in-person at an approved workplace.

#### **HEALTH INFORMATION TECHNICIAN**

The objective of this program has been designed to prepare students for entry-level employment in a medical front office, hospital office setting, or medical insurance company. Typical job titles for Health Information Technicians entering the field would be health information technicians, medical secretaries, medical insurance billers, and medical receptionists. The content of the program provides the student with specialized training in industry-current medical administrative procedures. Instruction in medical terminology, anatomy and physiology, processing insurance forms, scheduling appointments, collections, medical bookkeeping, and other critical patient services will be emphasized. Students will be able to have specialized hands-on training on processing equipment. This instruction ranges from introductory keyboarding and electronic calculating to current word processing skills in MS Word for Windows. At the completion of the classroom instruction, the student will receive supervised job-related skills on externship at a selected insurance company, hospital, or medical office setting to complete a well-rounded education.

## Successful completion of this course will lead to credit towards the Health Information Technician Associate of Applied Science Degree Program.

#### **DAY/EVENING PROGRAM SCHEDULE**

30 Classroom Weeks - 20 hours per week	Monday through Friday 4 hours per day
4 Weeks of Externship (estimated at 40 hours per week)	Monday through Friday hours to be arranged 8 hours per day
34 Total Program - Weeks	Format: T/H/DE
760 Clock Hours / 36 Semester Credit Hours	

This program does not have a cumulative final test or examination required for the completion of any program.

Course	TITLE	Clock Hours	Format	Sem. Credit Hours	Lecture Hours	Lab Hours
AP 114	Anatomy and Physiology I	40	T/H/DE	2.66	40	0
AP 115	Anatomy and Physiology II	40	T/H/DE	2.66	40	0
MT 110	Medical Terminology	60	T/H/DE	4.00	60	0
PH 101	Introduction to Pharmacology	20	T/H/DE	1.33	20	0
MO 110	Medical Office Administration	40	T/H/DE	2.66	40	0
COD 101	Introduction to Medical Insurance/Coding	40	T/H/DE	1.66	10	30
PC 101	Patient Communication	20	T/H/DE	0.99	10	10
MO 120	Medical Principles and Foundations	40	T/H/DE	2.66	40	0
KB 101	Keyboarding	20	T/H/DE	0.66	0	20
MO 130	Collections & Reimbursement Procedures	40	T/H/DE	2.33	30	10
MO 140	Introduction to Medical Bookkeeping & HIT	40	T/H/DE	2.33	30	10
EHR 110	Electronic Health Records	40	T/H/DE	1.99	20	20
COD 110	ICD-10-CM Coding	40	T/H/DE	1.99	20	20
EHR 120	Electronic Health Records II	40	T/H/DE	1.66	10	30
COD 120	Medical Coding II	40	T/H/DE	1.66	10	30
CS 103	Career Development	40	T/H/DE	1.99	20	20
EX 111	Externship for HIT	160	Т	3.55	0	160
	PROGRAM TOTALS	760		36	400	360

## **HEALTH INFORMATION TECHNICIAN**

#### DAY/EVENING SCHEDULE - MONDAY - FRIDAY

#### MODULE 1

Subject Areas	Hours Per Day	Total Hours	Sem. Credit	Total Weeks
Anatomy and Physiology I	4	40	г ээ	2
Anatomy and Physiology II	4	40	5.32	2

#### **MODULE 2**

Subject Areas	Hours Per Day	Total Hours	Sem. Credit	Total Weeks
Medical Terminology	4	60	гээ	3
Introduction to Pharmacology	4	20	5.33	1

#### **MODULE 3**

Subject Areas	Hours Per Day	Total Hours	Sem. Credit	Total Weeks
Medical Office Administration	4	40	4.22	2
Introduction to Medical Insurance/Coding	4	40	4.33	2

#### **MODULE 4**

Subject Areas	Hours Per Day	Total Hours	Sem. Credit	Total Weeks
Patient Communication	4	20	4.31	1
Medical Principles and Foundations	4	40		2
Keyboarding	4	20		1

#### **MODULE 5**

Subject Areas	Hours Per Day	Total Hours	Sem. Credit	Total Weeks
Introduction to Medical Bookkeeping & HIT	4	40	4.66	2
Collections & Reimbursement Procedures	4	40	4.66	2

#### **MODULE 6**

Subject Areas	Hours Per Day	Total Hours	Sem. Credit	Total Weeks
Electronic Health Records	4	40	2.00	2
ICD-10-CM Coding	4	40	3.98	2

#### **MODULE 7**

Subject Areas	Hours Per Day	<b>Total Hours</b>	Sem. Credit	Total Weeks
Electronic Health Records II	4	40	2 22	2
Medical Coding II	4	40	3.32	2

#### MODULE 8

Subject Areas	Hours Per Day	<b>Total Hours</b>	Sem. Credit	Total Weeks
Externship for HIT	8	160	F F4	4
Career Development	4	40	5.54	2

**NOTE**: Courses are organized in modular form, and the School reserves the right to modify sequence and content.

#### **MEDICAL ASSISTANT**

The objective of this program is to prepare students for entry-level employment in a variety of medical settings, such as a physician's office or medical clinic. Typical job titles for Medical Assistants entering the field would be Clinical Medical Assistant, Electrocardiogram Technician, Medical Secretary, and Medical Receptionist. The content of the program provides the student with specialized training in industry-current medical clinical and administrative procedures. Instruction in the clinical aspect of the program includes medical terminology, anatomy and physiology, patient relations, use and care of diagnostic equipment, venipuncture, injections, infection control protocol, EKG operations, urinalysis, and treatment procedures commonly performed in a medical setting. The administrative aspect includes scheduling appointments, medical bookkeeping, processing insurance forms, and other critical patient services.

Successful completion of this course will lead to credit towards the Medical Assistant Associate of Applied Science Degree Program.

#### **DAY/EVENING PROGRAM SCHEDULE**

30 weeks of instruction - 20 hours per week	Monday through Friday 4 hours per day	
4 weeks of Externship (estimated 40 hours per week)	Monday through Friday 8 hours per day	
34 Total Program - Weeks	Format: T	
760 Clock Hours / 33 Semester Credit Hours		

This program does not have a cumulative final test or examination required for the completion of any program.

Course	<b>DESCRIPTION</b> Medical Assistant	Clock Hours	Sem. Credit Hours	Lecture Hours	Lab Hours
AP 114	Anatomy and Physiology I	40	2.66	40	0
AP 115	Anatomy and Physiology II	40	2.66	40	0
MT 110	Medical Terminology	60	4.00	60	0
PH 101	Introduction to Pharmacology	20	1.33	20	0
MO 110	Medical Office Administration	40	2.33	30	10
COD 101	Introduction to Medical Insurance/Coding	20	0.99	10	10
PC 101	Patient Communication	20	0.99	10	10
MO 120	Medical Principles and Foundations	40	1.99	20	20
KB 101	Keyboarding	40	1.66	10	30
CP 110	Clinical Procedures I	40	1.66	10	30
CP 120	Clinical Procedures II	40	1.66	10	30
CP 130	Clinical Procedures III	20	0.83	5	15
LP 110	Laboratory Procedures I	20	0.99	10	10
LP 120	Laboratory Procedures II	40	1.66	10	30
CP 140	Clinical Procedures IV	40	1.66	10	30
CP 150	Clinical Procedures V	40	1.66	10	30
CS 103	Career Development	40	1.66	10	30
EX 111	Externship for MA	160	3.55	0	160
	PROGRAM TOTALS	760	33.94	315	445

## **MEDICAL ASSISTANT**

## DAY/EVENING SCHEDULE - MONDAY - FRIDAY

## MODULE 1

Subject Areas	Hours Per Day	Total Hours	Sem. Credit	Total Weeks
Anatomy and Physiology I	4	40	F 22	2
Anatomy and Physiology II	4	40	5.32	2

## **MODULE 2**

Subject Areas	Hours Per Day	Total Hours	Sem. Credit	Total Weeks
Medical Terminology	4	60	F 22	3
Introduction to Pharmacology	4	20	5.33	1

## MODULE 3

Subject Areas	Hours Per Day	Total Hours	Sem. Credit	Total Weeks
Medical Office Administration	4	40		2
Introduction to Medical Insurance/Coding	4	20	4.31	1
Patient Communication	4	20		1

## MODULE 4

Subject Areas	Hours Per Day	Total Hours	Sem. Credit	Total Weeks
Medical Principles and Foundations	4	40	2.65	2
Keyboarding	4	40	3.65	2

## **MODULE 5**

Subject Areas	Hours Per Day	Total Hours	Sem. Credit	Total Weeks
Clinical Procedures I	4	40	2 22	2
Clinical Procedures II	4	40	3.32	2

## MODULE 6

Subject Areas	Hours Per Day	Total Hours	Sem. Credit	Total Weeks
Clinical Procedures III	4	20		1
Laboratory Procedures I	4	40	3.48	2
Laboratory Procedures II	4	20		1

## MODULE 7

Subject Areas	Hours Per Day	Total Hours	Sem. Credit	Total Weeks
Clinical Procedures IV	4	40	2 22	2
Clinical Procedures V	4	40	3.32	2

#### **MODULE 8**

MODOLL 0					
Subject Areas	Hours Per Day	Total Hours	Sem. Credit	Total Weeks	
Career Development	4	40	F 24	2	
Externship for MA	8	160	5.21	4	

## **ELECTROCARDIOGRAM TECHNICIAN**

The objective of program is preparing individuals, under the supervision of physicians and nurses, to administer Electrocardiography (EKG/ECG) diagnostic examinations and report results to the treatment team. Including instruction in basic anatomy and physiology, the cardiovascular system, medical terminology, cardiovascular medications and effects, patient care, and EKG/ECG administration, equipment operation and maintenance, interpretation of cardiac rhythm, patient record management, professional standards and ethics. Upon successful completion of this course, students will be eligible to take the national certification exam.

Successful completion of this course will lead to credit towards the Medical Assistant Associate of Applied Science Degree Program.

#### **DAY/EVENING PROGRAM SCHEDULE**

3 weeks of instruction - 20 hours per week	Monday through Friday 4 hours per day
3 Total Program – Weeks	Format: T
60 Clock Hours / 3 Semester Credit Hours	

This program does not have a cumulative final test or examination required for the completion of any program.

Course	DESCRIPTION	Clock Hours	Sem. Credit Hours	Lecture Hours	Lab Hours
AP 118	Anatomy and Physiology for EKG/ECG	10	0.66	10	0
MT 118	Medical Terminology for EKG/ECG	10	0.66	10	0
EKG 190	Electrocardiography Procedures	40	1.99	20	20
	PROGRAM TOTALS	60	3.31	40	20

# **Technology Programs**

PROGRAMS	CLOCK HOURS	FORMAT	PAGE
HVAC Technician II	900	T/H/DE	40
Software Development & Programming	720	T/DE	42
Fiber Optics for Professionals	125	Т	44

(**T**)Traditional: fully in-person, (**H**)Hybrid: At least 51% of the program must be completed on-campus, (**DE**) Distance Education: part or all of the program may be available virtually.

## **HVAC Technician II**

The objective of the HVAC Technician II program is to prepare graduates for entry-level positions as a Heating, Air Conditioning, and Refrigeration Mechanic and/or Installer through relevant classroom knowledge and hands-on technical skills. This program's learning objectives have been developed by the National Center for Construction Education and Research (NCCER) and prepare students to take the EPA 608 Universal Certification before graduation.

Students pursuing a career as an HVAC Technician are prepared to take the EPA 608 Universal Certification.

## **DAY/EVENING PROGRAM SCHEDULE**

Monday through Friday   4 hours per day	20 hours per week
45 Total Program – Weeks	Format: T/H/DE
900 Clock Hours / 45 Semester Credit Hours	

This program does not have a cumulative final test or examination required for the completion of any program

Course	<b>DESCRIPTION</b> HVAC Technician	Clock Hours	Format	Sem. Credit Hours	Lecture Hours	Lab Hours
TRD 101	Trades Skills Core Concepts	80	T/H/DE	4.67	60	20
HVAC 112	Air Distribution, Venting, Maintenance, and Air Conditioning	80	T/H/DE	4.00	40	40
HVAC 122	Electronics and Control Circuit Troubleshooting	80	T/H/DE	4.00	40	40
HVAC 132	Electric Heat, Accessories, Metering, and Compressors	80	T/H/DE	4.00	40	40
HVAC 142	Heat Pumps and Handling Refrigerants	80	T/H/DE	4.00	40	40
HVAC 152	Maintenance and Troubleshooting	80	T/H/DE	4.00	40	40
HVAC 162	Hydronic, Airside, and Balancing Systems	80	T/H/DE	4.00	40	40
HVAC 172	Troubleshooting Systems and Indoor Quality Systems	80	T/H/DE	4.00	40	40
HVAC 182	Refrigeration	80	T/H/DE	4.00	40	40
HVAC 192	Codes & Licenses, Energy, Water Treatment, and Building Management	80	T/H/DE	4.67	60	20
CS 105	Career Development for HVAC Technicians	20	T/H/DE	0.83	5	15
CAP 200	HVAC Capstone	40	T/H/DE	1.33	0	40
PRP 212	HVAC Certification Preparedness	40	T/H/DE	2.33	30	10
	PROGRAM TOTALS	900		45.83	475	425

## **HVAC TECHNICIAN II**

## **DAY/EVENING SCHEDULE – MONDAY - FRIDAY**

#### MODULE 1

Subject Areas	Hours / Day	Total Hours	Sem. Credit	Total Weeks
Trades Skills Core Concepts	4	80	4.66	4

## **MODULE 2**

Subject Areas	Hours / Day	Total Hours	Sem. Credit	Total Weeks
Air Distribution, Venting, Maintenance, and Air Conditioning	4	80	3.99	4

## MODULE 3

Subject Areas	Hours / Day	Total Hours	Sem. Credit	Total Weeks
Electronics and Control Circuit Troubleshooting	4	80	3.99	4

## **MODULE 4**

Subject Areas	Hours / Day	Total Hours	Sem. Credit	Total Weeks
Electric Heat, Accessories, Metering, and Compressors	4	80	3.99	4

## **MODULE 5**

Subject Areas	Hours / Day	Total Hours	Sem. Credit	Total Weeks
Heat Pumps and Handling Refrigerants	4	80	3.99	4

## **MODULE 6**

Subject Areas	Hours Per Day	Total Hours	Sem. Credit	Total Weeks
Maintenance and Troubleshooting	4	80	3.99	4

## **MODULE 7**

Subject Areas	Hours Per Day	Total Hours	Sem. Credit	Total Weeks
Hydronic, Airside, and Balancing Systems	4	80	3.99	4

## MODULE 8

Subject Areas	Hours Per Day	Total Hours	Sem. Credit	Total Weeks
Troubleshooting Systems and Indoor Quality	4	80	3.99	4
Systems				

## MODULE 9

Subject Areas	Hours Per Day	<b>Total Hours</b>	Sem. Credit	Total Weeks
Refrigeration	4	80	3.99	4

## **MODULE 10**

Subject Areas	Hours Per Day	<b>Total Hours</b>	Sem. Credit	Total Weeks
Codes & Licenses, Energy, Water Treatment,	4	80	4.66	4
and Building Management				

## **MODULE 11**

Subject Areas	Hours Per Day	Total Hours	Sem. Credit	Total Weeks
Career Development for HVAC Technicians	4	20	2.16	1
HVAC Certification Preparedness	4	40	3.16	2

## **MODULE 12**

Subject Areas	Hours Per Day	Total Hours	Sem. Credit	Total Weeks
HVAC Capstone	4	40	1.33	2

## SOFTWARE DEVELOPMENT & PROGRAMMING

The objective of the Software Development program has been designed to prepare students for entry-level employment in a variety of office settings. Typical job titles for software developers entering the field would be software developer, web designer, systems programmer, and application developer. The content of the program provides the student with specialized training in industry-current programming languages and computer-based systems. Instruction in web development aspect of the program includes coding in HTML5, CSS3, JavaScript, XML. The main programming languages included in the program are JAVA, C#/C++, RUBY, VB.NET.

Successful completion of this course will lead to credit towards the Software Development & Programming, Associate of Applied Technology Degree Program.

#### **DAY/EVENING PROGRAM SCHEDULE**

,	
36 weeks of instruction - 20 hours per week	Monday through Friday 4 hours per day
36 Total Program - Weeks	Format: T/DE
720 Clock Hours / 37 Semester Credit Hours	

This program does not have a cumulative final test or examination required for the completion of any program.

Course	<b>DESCRIPTION</b> Software Development & Programming	Clock Hours	Format	Sem. Credit Hours	Lecture Hours	Lab Hours
SDP 101	Introduction to Programming	20	T/DE	1.33	20	0
SDPM 101	Introduction to Software Development and Project Management	80	T/DE	5.33	80	0
PIP 101	Basic Programming with Python	80	T/DE	4.66	60	20
OOP 101	Object-Oriented Programming	20	T/DE	1.33	20	0
OOP 120	C#/C++ Programming Language	60	T/DE	2.66	20	40
OOP 130	Java Programming	80	T/DE	3.99	40	40
SQL 104	Understanding SQL and Databases	80	T/DE	3.99	40	40
WEB 110	Web Development	80	T/DE	3.99	40	40
CSWS 103	Client-Side Web Scripting	80	T/DE	3.99	40	40
SSWA 104	Server-Side Web Application	80	T/DE	3.99	40	40
TTS 112	Testing and Security	60	T/DE	2.66	20	40
CS 106	Career Development	20	T/DE	0.99	10	10
	PROGRAM TOTALS	720		37.58	410	310

## **SOFTWARE DEVELOPMENT & PROGRAMMING**

DAY/EVENING SCHEDULE - MONDAY - FRIDAY

## MODULE 1

Subject Areas	Hours Per Day	Total Hours	Sem. Credits	Total Weeks
Introduction to Programming	4	20	5.33	1
Introduction to Software Development and Project Management	4	60		3

#### **MODULE 2**

Subject Areas	Hours Per Day	Total Hours	Sem. Credits	Total Weeks
Basic Programming with Python	4	80	4.66	4

#### **MODULE 3**

Subject Areas	Hours Per Day	Total Hours	Sem. Credits	Total Weeks
Object-Oriented Programming	4	20	2.00	1
C#/C++ Programming Language	4	60	3.99	3

## **MODULE 4**

Subject Areas	Hours Per Day	Total Hours	Sem. Credits	Total Weeks
Java Programming	4	80	3.99	4

## **MODULE 5**

Subject Areas	Hours Per Day	Total Hours	Sem. Credits	Total Weeks
Understanding SQL and Databases	4	80	3.99	4

## **MODULE 6**

Subject Areas	Hours Per Day	Total Hours	Sem. Credits	Total Weeks
Web Development	4	80	3.99	4

#### **MODULE 7**

Subject Areas	Hours Per Day	Total Hours	Sem. Credits	Total Weeks
Client-Side Web Scripting	4	80	3.99	4

## **MODULE 8**

Subject Areas	Hours Per Day	Total Hours	Sem. Credits	Total Weeks
Server-Side Web Application	4	80	3.99	4

## **MODULE 9**

Subject Areas	Hours Per Day	Total Hours	Sem. Credits	Total Weeks
Testing and Security	4	60	2.65	3
Career Development	4	20	3.65	1

## FIBER OPTICS FOR PROFESSIONALS

The objective of the Fiber Optics for Professionals (FFP) program is to prepare students to be competent in Fiber Optic technology disciplines through classroom training and practical hands-on application. The student will learn cable, panel, and closure preparation, fusion splicing, optical loss, reflection testing, and Optical time-domain reflectometer (ODTR) operations. This will develop a practical understanding of the knowledge and skill requirements needed to design, install, test, and maintain a Fiber to the Home/Premises/Curb (FTTx) network. The student will learn about specific technologies and recommendations specified by ITU-T G.983 Passive Optical Network (PON) standards from topology to active and passive components. While not a requirement for program completion, successful students will be eligible for certifications as a Fiber Optic Technician (CFOT), Fiber Optics Technician in Splicing (CFOT/S), Fiber Optics Technician in Testing (CFOT/T), and/or as a Certified Fiber Optic Technician for Fiber to the Home/Premises/Curb (CFOT/H, FTTx) through the Fiber Optics Association (FOA). A diploma will be issued until successful completion of the program and when all tuition and fees are paid in full. Equipment the students may use includes, but is not limited to, desktop computers, oscilloscopes, volt-ohmmeters, optical time domain reflectometers (OTDR), optical loss test set (OLTS), light score & power meters (LSPM), visual fault locators (VFL), fusion splicers, mechanical splices, cleavers, crimpers, fiber strippers, Kevlar shears, scribes, microscopes, and polishing films.

## Successful completion of this course will lead to credit towards the Information Systems & Communication Technology AAT Degree Program.

#### **DAY/EVENING PROGRAM SCHEDULE**

20 hours per week	Monday through Friday
Format: T	4 hours per day
125 Clock Hours / 7 Semester Credit Hours	

This program does not have a cumulative final test or examination required for the completion of any program.

Course	DESCRIPTION	Clock Hours	Sem. Credit Hours	Lecture Hours	Lab Hours
FO 101	Basic Fiber Optics	40	2.49	35	5
CPCT 110	Basic Premises Cabling (CPCT)	30	1.66	20	10
FFP 103	Fiber to the Premises – FTTx (CFOS-H)	20	0.99	10	10
FFP 104	Advanced Fiber Optics – Splicing (CFOS-S)	20	1.16	15	5
FFP 105	Advanced Fiber Optics – Testing (CFOS-T)	15	0.82	10	5
	PROGRAM TOTALS	125	7.12	90	35

## **Criminal Justice Programs**

PROGRAM	CLOCK HOURS	FORMAT	PAGE
Criminal Justice & Public Safety	720	T/H/DE	46

(**T**)Traditional: fully in-person, (**H**)Hybrid: At least 51% of the program must be completed on-campus, (**DE**) Distance Education: part or all of the program may be available virtually.

## **CRIMINAL JUSTICE & PUBLIC SAFETY**

The objective of the Criminal Justice and Public Safety diploma program is designed to prepare graduates for entry into state, local, or federal law enforcement, corrections, or private security. Students will study the U.S. Constitution, American court systems, Federal and California state laws, and past and current criminal trends. Students will be prepared to properly articulate, format, and complete various types of reports and professional communication. Before graduation, students will be introduced to the application process for various local, state, and federal agencies.

Students will be required to maintain personal physical fitness throughout the program and pass a standardized physical assessment prior to graduation. Upon completion of all theory classes, students will be required to complete a practical capstone, concentrating on real-world scenarios. Students will train with various equipment, including simulated firearms and dry-fire range, forensic testing kits (i.e., fingerprinting, blood splatter, bullet trajectory, gun powder analysis), and officer duty belts with handcuffs and attachments.

Students pursuing a career in the Security Field living in California may be required to obtain a Guard Card before employment. ATA College instructors are approved by the Bureau of Security and Investigative Services (Approval # ATC 2881) to provide this training and ATA College will assist students in seeking a Guard Card.

## Successful completion of this course will lead to credit towards the Associate of Science in Criminal Justice Degree Program.

#### **DAY/EVENING PROGRAM SCHEDULE**

	0.122 0 22
36 weeks of instruction - 20 hours per week	Monday through Friday 4 hours per day
36 Total Program – Weeks	Format: T/H/DE
720 Clock Hours / 40 Semester Credit Hours	

This program does not have a cumulative final test or examination required for the completion of the program.

Course	<b>DESCRIPTION</b> Criminal Justice & Public Safety	Clock Hours	Format	Sem. Credit Hours	Lecture Hours	Lab Hours
LS 101	Introduction to Criminal Justice	40	T/H/DE	2.66	40	0
LS 110	Criminal Law	40	T/H/DE	2.66	40	0
LS 120	Criminal Procedure and the Constitution	40	T/H/DE	2.66	40	0
LS 130	Deviance & Violence	40	T/H/DE	1.99	20	20
LS 140	Criminal Evidence	40	T/H/DE	2.33	30	10
LS 150	Gangs and Narcotics	40	T/H/DE	2.66	40	0
LS 160	American Criminal Courts	40	T/H/DE	2.66	40	0
LS 201	Communication & Report Writing	40	T/H/DE	1.99	20	20
LS 203	Public Safety Hiring Process	40	T/H/DE	1.99	20	20
CS 108	Career Development	40	T/H/DE	1.99	20	20
HLS 101	Introduction to Homeland Security & Terrorism	40	T/H/DE	2.66	40	0
CO 101	Introduction to Corrections	40	T/H/DE	2.66	40	0
CT 101	Principles of Investigation	40	T/H/DE	2.66	40	0
CPS 101	Introduction to Corporate Security	40	T/H/DE	2.66	40	0
PHYS 101	Physical Fitness for Public Safety	40	T/H/DE	1.66	10	30
ENG 101	Writing I	40	T/H/DE	1.66	10	30
STP 200	Strategic Operations Capstone	80	T/H/DE	3.33	20	60
	PROGRAM TOTALS	720		40.88	510	210

## **CRIMINAL JUSTICE & PUBLIC SAFETY**

DAY/EVENING SCHEDULE - MONDAY - FRIDAY

## MODULE 1

Subject Areas	Hours Per Day	Total Hours	Sem. Credit	Total Weeks
Introduction to Criminal Justice	4	40	F 22	2
Criminal Law	4	40	5.32	2

## **MODULE 2**

Subject Areas	Hours Per Day	Total Hours	Sem. Credit	Total Weeks
Criminal Procedure and the Constitution	4	40	4.65	2
Deviance & Violence	4	40	4.65	2

## MODULE 3

Subject Areas	Hours Per Day	Total Hours	Sem. Credit	Total Weeks
Criminal Evidence	4	40	Г 22	2
Gangs and Narcotics	4	40	5.32	2

## **MODULE 4**

Subject Areas	Hours Per Day	Total Hours	Sem. Credit	Total Weeks
American Criminal Courts	4	40	4.65	2
Communication & Report Writing	4	40	4.65	2

## **MODULE 5**

Subject Areas	Hours Per Day	Total Hours	Sem. Credit	Total Weeks
Public Safety Hiring Process	4	40	2.00	2
Career Development	4	40	3.98	2

## **MODULE 6**

Subject Areas	Hours Per Day	Total Hours	Sem. Credit	Total Weeks
Introduction to Homeland Security & Terrorism	4	40	5.32	2
Introduction to Corrections	4	40		2

## **MODULE 7**

Subject Areas	Hours Per Day	<b>Total Hours</b>	Sem. Credit	Total Weeks
Principles of Investigation	4	40	F 22	2
Introduction to Corporate Security	4	40	5.32	2

## MODULE 8

Subject Areas	Hours Per Day	<b>Total Hours</b>	Sem. Credit	Total Weeks
Physical Fitness for Public Safety	4	40	2 22	2
Writing I	4	40	3.32	2

## **MODULE 9**

Subject Areas	Hours Per Day	Total Hours	Sem. Credit	Total Weeks
Strategic Operations Capstone	4	80	3.99	4

## **Associate Degree Programs**

COURSE	CLOCK HOURS	Format	PAGE
Software Development & Programming, AAT	1200	T/H/DE	49
Medical Assistant, Associate of Applied Science	1240	Т	52
Health Information Technician, AAS	1260	Т	56
Associate of Science in Criminal Justice	1200	T/H/DE	60

(**T**)Traditional: fully in-person, (**H**)Hybrid: At least 50% of the program must be completed on-campus, (**DE**) Distance Education: part or all the program may be available virtually.

# SOFTWARE DEVELOPMENT & PROGRAMMING ASSOCIATE OF APPLIED TECHNOLOGY

The objective of the Software Development & Programming Associates of Applied Technology program has been designed to prepare students for entry-level employment in a variety of office settings. Typical job titles for software developers entering the field would be software developer, web designer, systems programmer, and application developer. The content of the program provides the student with specialized training in industry-current programming languages and computer-based systems. Instruction in web development aspect of the program includes coding in HTML5, CSS3, JavaScript, XML. The main programming languages included in the program are JAVA, C#/C++, RUBY, VB.NET. Students are prepared to sit for the Microsoft Certified Solution Developer (MCSD) Certification.

## Successful completion of this program will lead to an Associate of Applied Technology Degree.

## **DAY/EVENING PROGRAM SCHEDULE**

60 weeks of instruction - 20 hours per week	Monday through Friday 4 hours per day
60 Total Program - Weeks	Format: T/H/DE
1200 Clock Hours / 64 Semester Credit Hours	

This program does not have a cumulative final test or examination required for the completion of any program.

Course	<b>DESCRIPTION</b> General Education	Clock Hours	Format	Sem. Credit Hours	Lecture Hours	Lab Hours
BE 101	Business Ethics	40	T/H/DE	2.66	40	0
PSY 103	Introduction to Psychology	60	T/H/DE	4.00	60	0
SCI 101	Earth Science	60	T/H/DE	3.72	52	8
MTH 101	College Math	60	T/H/DE	3.72	52	8
CPA 101	Business Computer Applications	40	T/H/DE	1.99	20	20
HIS 101	U.S. History	60	T/H/DE	4.00	60	0

Course	<b>DESCRIPTION</b> Software Development & Programming	Clock Hours	Format	Sem. Credit Hours	Lecture Hours	Lab Hours
SDP 101	Introduction to Programming	20	T/H/DE	1.33	20	0
SDPM 101	Introduction to Software Development and Project Management	60	T/H/DE	4.00	60	0
PIP 101	Basic Programming with Python	80	T/H/DE	4.66	60	20
OOP 101	Object-Oriented Programming	20	T/H/DE	1.33	20	0
OOP 120	C#/C++ Programming Language	60	T/H/DE	2.66	20	40
OOP 130	Java Programming	80	T/H/DE	3.99	40	40
SQL 104	Understanding SQL and Databases	80	T/H/DE	3.99	40	40
WEB 110	Web Development	80	T/H/DE	3.99	40	40
CSWS 103	Client-Side Web Scripting	80	T/H/DE	3.99	40	40
SSWA 104	Server-Side Web Application	80	T/H/DE	3.99	40	40
TTS 112	Testing and Security	60	T/H/DE	2.66	20	40
CS 106	Career Development	20	T/H/DE	0.99	10	10

Course	<b>DESCRIPTION</b> Associate of Applied Technology	Clock Hours	Format	Sem. Credit Hours	Lecture Hours	Lab Hours
SDC 200	Software Development Capstone Project	80	T/H/DE	2.99	10	70
PEAR200	Pearson Cert IT Specialist Certification	80	T/H/DE	3.99	40	40
	PROGRAM TOTALS	1200		64	744	456

## **SOFTWARE DEVELOPMENT & PROGRAMMING**

## **ASSOCIATE OF APPLIED TECHNOLOGY**

DAY/EVENING SCHEDULE - MONDAY - FRIDAY

MODULE 1
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Subject Areas	Hours Per Day	Total Hours	Sem. Credits	Total Weeks
Introduction to Programming	4	20		1
Introduction to Software Development and Project Management	4	60	5.33	3

## MODULE 2

Subject Areas	Hours Per Day	Total Hours	Sem. Credits	Total Weeks
Basic Programming with Python	4	80	4.66	4

## MODULE 3

Subject Areas	Hours Per Day	Total Hours	Sem. Credits	Total Weeks
Object-Oriented Programming	4	20	2.00	1
C#/C++ Programming Language	4	60	3.99	3

## **MODULE 4**

Subject Areas	Hours Per Day	<b>Total Hours</b>	Sem. Credits	Total Weeks
Java Programming	4	80	3.99	4

## **MODULE 5**

Subject Areas	Hours Per Day	Total Hours	Sem. Credits	Total Weeks
Understanding SQL and Databases	4	80	3.99	4

## **MODULE 6**

Subject Areas	Hours Per Day	<b>Total Hours</b>	Sem. Credits	Total Weeks
Web Development	4	80	3.99	4

## **MODULE 7**

Subject Areas	Hours Per Day	Total Hours	Sem. Credits	Total Weeks
Client-Side Web Scripting	4	80	3.99	4

## MODULE 8

Subject Areas	Hours Per Day	Total Hours	Sem. Credits	Total Weeks
Server-Side Web Application	4	80	3.99	4

## **MODULE 9**

Subject Areas	Hours Per Day	Total Hours	Sem. Credits	Total Weeks
Testing and Security	4	60	2.65	3
Career Development	4	20	3.65	1

## **MODULE 10**

Subject Areas	Hours Per Day	Total Hours	Sem. Credit	Total Weeks
Software Development Capstone Project	4	80	2.99	4

## **MODULE 11**

Subject Areas	Hours Per Day	<b>Total Hours</b>	Sem. Credit	Total Weeks
Pearson Certification	4	80	3.99	4

## **MODULE 12**

Subject Areas	Hours Per Day	Total Hours	Sem. Credit	Total Weeks
U.S. History	4	60	F 1F	3
MS Word/Business Ethics	4	20	5.15	1

## **MODULE 13**

Subject Areas	Hours Per Day	Total Hours	Sem. Credit	Total Weeks
Introduction to Psychology	4	60	Г 1Г	3
MS PowerPoint/Business Ethics	4	20	5.15	1

## **MODULE 14**

Subject Areas	Hours Per Day	Total Hours	Sem. Credit	Total Weeks
Earth Science	4	60	4.07	3
MS Excel I/Business Ethics	4	20	4.87	1

## **MODULE 15**

Subject Areas	Hours Per Day	Total Hours	Sem. Credit	Total Weeks
College Math	4	60	4.07	3
MS Excel II/Business Ethics	4	20	4.87	1

# MEDICAL ASSISTANT ASSOCIATE OF APPLIED SCIENCE

The Objective of the Medical Assistant Associate of Applied Science program has been designed to prepare students for entry-level employment in a variety of medical settings, such as a physician's office or medical clinic. Typical job titles for Medical Assistants entering the field would be Clinical Medical Assistant, Electrocardiogram Technician, Medical Secretary, and Medical Receptionist. The content of the program provides the student with specialized training in industry-current medical clinical and administrative procedures. Instruction in the clinical aspect of the program includes medical terminology, anatomy and physiology, patient relations, use and care of diagnostic equipment, venipuncture, injections, infection control protocol, EKG operations, urinalysis, and treatment procedures commonly performed in a medical setting. The administrative aspect includes scheduling appointments, medical bookkeeping, processing insurance forms, and other critical patient services.

## Successful completion of this course will lead to an Associate of Applied Science Degree.

## **DAY/EVENING PROGRAM SCHEDULE**

56 weeks of instruction - 20 hours per week	Monday through Friday 4 hours per day
4 weeks of Externship (Estimated 40 hours per week)	Monday through Friday MA extern 8 hours per day
60 Total Program - Weeks	Format: T
1240 Clock Hours / 64 Semester Credit Hours	

This program does not have a cumulative final test or examination required for the completion of any program.

Course	<b>DESCRIPTION</b> General Education	Clock Hours	Sem. Credit Hours	Lecture Hours	Lab Hours
BE 101	Business Ethics	40	2.66	40	0
PSY 103	Introduction to Psychology	60	4.00	60	0
SCI 101	Earth Science	60	3.72	52	8
MTH 101	College Math	60	3.72	52	8
CPA 101	Business Computer Applications	40	1.99	20	20
HIS 101	U.S. History	60	4.00	60	0

Course	<b>DESCRIPTION</b> Medical Assistant	Clock Hours	Sem. Credit Hours	Lecture Hours	Lab Hours
AP 114	Anatomy and Physiology I	40	2.66	40	0
AP 115	Anatomy and Physiology II	40	2.66	40	0
MT 110	Medical Terminology	60	4.00	60	0
PH 101	Introduction to Pharmacology	20	1.33	20	0
MO 110	Medical Office Administration	40	2.33	30	10
COD 101	Introduction to Medical Insurance/Coding	20	0.99	10	10
PC 101	Patient Communication	20	0.99	10	10
MO 120	Medical Principles and Foundations	40	1.99	20	20
KB 101	Keyboarding	20	1.66	0	20
CP 110	Clinical Procedures I	40	1.66	10	30
CP 120	Clinical Procedures II	40	1.66	10	30
CP 130	Clinical Procedures III	40	0.83	10	30
LP 110	Laboratory Procedures I	20	0.99	15	5

LP 120	Laboratory Procedures II	40	1.66	10	30
CP 140	Clinical Procedures IV	40	1.66	10	30
CP 150	Clinical Procedures V	40	1.66	10	30
CS 103	Career Development	40	1.66	10	30
EX 111	Externship for MA	160	3.55	0	160

Course	<b>DESCRIPTION</b> Medical Assistant AAS Electives	Clock Hours	Sem. Credit Hours	Lecture Hours	Lab Hours
EKG 201	Electrocardiography	80	5.33	80	0
NPC 114	NCCT Preparation Course	80	5.33	80	0
	PROGRAM TOTALS	1240		759	481

## **MEDICAL ASSISTANT**

## **ASSOCIATE OF APPLIED SCIENCE**

## DAY/EVENING SCHEDULE - MONDAY - FRIDAY

## MODULE 1

Subject Areas	Hours Per Day	Total Hours	Sem. Credit	Total Weeks
Anatomy and Physiology I	4	40	F 22	2
Anatomy and Physiology II	4	40	5.32	2

## MODULE 2

Subject Areas	Hours Per Day	<b>Total Hours</b>	Sem. Credit	Total Weeks
Medical Terminology	4	60	F 22	3
Introduction to Pharmacology	4	20	5.33	1

## MODULE 3

Subject Areas	Hours Per Day	Total Hours	Sem. Credit	Total Weeks
Medical Office Administration	4	40		2
Introduction to Medical Insurance/Coding	4	20	4.31	1
Patient Communication	4	20		1

## **MODULE 4**

Subject Areas	Hours Per Day	Total Hours	Sem. Credit	Total Weeks
Medical Principles and Foundations	4	40	2.65	2
Keyboarding	4	40	3.65	2

## **MODULE 5**

Subject Areas	Hours Per Day	Total Hours	Sem. Credit	Total Weeks
Clinical Procedures I	4	40	2.22	2
Clinical Procedures II	4	40	3.32	2

## **MODULE 6**

Subject Areas	Hours Per Day	Total Hours	Sem. Credit	Total Weeks
Clinical Procedures III	4	20	3.48	1
Laboratory Procedures I	4	40		2
Laboratory Procedures II	4	20		1

## **MODULE 7**

Subject Areas	Hours Per Day	Total Hours	Sem. Credit	Total Weeks
Clinical Procedures IV	4	40	2.22	2
Clinical Procedures V	4	40	3.32	2

## MODULE 8

Subject Areas	Hours Per Day	Total Hours	Sem. Credit	Total Weeks
Career Development	4	40	F 21	2
Externship for MA	8	160	5.21	4

## MODULE 9/10

Subject Areas	Hours Per Day	Total Hours	Sem. Credit	Total Weeks
Electrocardiography	4	80	5.33	4
NCCT Preparation Course	4	80	5.33	4

## MODULE 11

Subject Areas	Hours Per Day	Total Hours	Sem. Credit	Total Weeks
U.S. History	4	60	F 1F	3
MS Word/Business Ethics	4	20	5.15	1

## MODULE 12

Subject Areas	Hours Per Day	Total Hours	Sem. Credit	Total Weeks
Introduction to Psychology	4	60	F 1F	3
MS PowerPoint/Business Ethics	4	20	5.15	1

## **MODULE 13**

Subject Areas	Hours Per Day	Total Hours	Sem. Credit	Total Weeks
Earth Science	4	60	4.07	3
MS Excel I/Business Ethics	4	20	4.87	1

## **MODULE 14**

Subject Areas	Hours Per Day	Total Hours	Sem. Credit	Total Weeks
College Math	4	60	4.07	3
MS Excel II/Business Ethics	4	20	4.87	1

## **HEALTH INFORMATION TECHNICIAN**

## **ASSOCIATE OF APPLIED SCIENCE**

The objective of this program has been designed to prepare students for entry-level employment in a medical front office, hospital office setting, or medical insurance company. Typical job titles for Health Information Technicians entering the field would be health information technician, medical secretary, medical insurance biller, and medical receptionist. The content of the program provides the student with specialized training in industry-current medical administrative procedures. Instruction in medical terminology, anatomy and physiology, processing insurance forms, scheduling appointments, collections, medical bookkeeping, and other critical patient services will be emphasized. Students will be able to have specialized hands-on training on processing equipment. This instruction ranges from introductory keyboarding and electronic calculating to current word processing skills in MS Word for Windows. After the classroom instruction, the student will receive supervised job-related skills on externship at a selected insurance company, hospital, or medical office setting to complete a well-rounded education.

# Successful completion of this course will lead to an Associate of Applied Science Degree. DAY/EVENING PROGRAM SCHEDULE

54 weeks of instruction - 20 hours per week	Monday through Friday 4 hours per day
4 weeks of Externship (Estimated 40 hours per week) 2 weeks of Externship (Estimated 20 hours per week)	Monday through Friday HIT extern 8 hours per day Clinical 4 hours per day
60 Total Program - Weeks	Format: T
1260 Clock Hours / 64 Semester Credit Hours	

This program does not have a cumulative final test or examination required for the completion of any program.

Course	<b>DESCRIPTION</b> General Education	Clock Hours	Sem. Credit Hours	Lecture Hours	Lab Hours
BE 101	Business Ethics	40	2.66	40	0
PSY 103	Introduction to Psychology	60	4.00	60	0
SCI 101	Earth Science	60	3.72	52	8
MTH 101	College Math	60	3.72	52	8
CPA 101	Business Computer Applications	40	1.99	20	20
HIS 101	U.S. History	60	4.00	60	0

Course	<b>DESCRIPTION</b> Health Information Technician	Clock Hours	Sem. Credit Hours	Lecture Hours	Lab Hours
AP 114	Anatomy and Physiology I	40	2.66	40	0
AP 115	Anatomy and Physiology II	40	2.66	40	0
MT 110	Medical Terminology	60	4.00	60	0
PH 101	Introduction to Pharmacology	20	1.33	20	0
MO 110	Medical Office Administration	40	2.66	40	0
COD 101	Introduction to Medical Insurance/Coding	40	1.66	10	30
PC 101	Patient Communication	20	0.99	10	10
MO 120	Medical Principles and Foundations	40	2.66	40	0
KB 101	Keyboarding	40	1.33	0	40
MO 130	Collections & Reimbursement Procedures	40	2.33	30	10
MO 140	Introduction to Medical Bookkeeping & HIT	40	2.33	30	10

EHR 110	Electronic Health Records	40	1.99	20	20
COD 110	ICD-10-CM Coding	40	1.99	20	20
EHR 120	Electronic Health Records II	40	1.66	10	30
COD 120	Medical Coding II	40	1.66	10	30
CS 103	Career Development	40	1.99	20	20
EX 111	Externship for HIT	160	3.55	0	160

Course	<b>DESCRIPTION</b> Associate of Applied Science	Clock Hours	Sem. Credit Hours	Lecture Hours	Lab Hours
NPC 115	NCCT Preparation Course (NCMOA)	80	3.33	20	60
NPC 116	NCCT Preparation Course (NCICS)	80	3.99	40	40
	PROGRAM TOTALS	1240	64	744	516

## **HEALTH INFORMATION TECHNICIAN**

## **ASSOCIATE OF APPLIED SCIENCE**

DAY/EVENING SCHEDULE - MONDAY - FRIDAY

#### **MODULE 1**

Subject Areas	Hours Per Day	Total Hours	Sem. Credit	Total Weeks
Anatomy and Physiology I	4	40	F 22	2
Anatomy and Physiology II	4	40	5.32	2

## MODULE 2

Subject Areas	Hours Per Day	Total Hours	Sem. Credit	Total Weeks
Medical Terminology	4	60	F 22	3
Introduction to Pharmacology	4	20	5.33	1

## MODULE 3

Subject Areas	Hours Per Day	Total Hours	Sem. Credit	Total Weeks
Medical Office Administration	4	40	4.33	2
Introduction to Medical Insurance/Coding	4	40		2
Patient Communication	4	20		1

## **MODULE 4**

Subject Areas	Hours Per Day	Total Hours	Sem. Credit	Total Weeks
Patient Communication	4	20	4.31	1
Medical Principles and Foundations	4	40		2
Keyboarding	4	20		1

## **MODULE 5**

Subject Areas	Hours Per Day	Total Hours	Sem. Credit	Total Weeks
Introduction to Medical Bookkeeping & HIT	4	40	4.66	2
Collections & Reimbursement Procedures	4	40	4.66	2

## **MODULE 6**

Subject Areas	Hours Per Day	Total Hours	Sem. Credit	Total Weeks
Electronic Health Records	4	40	3.98	2
ICD-10-CM Coding	4	40		2

#### **MODULE 7**

Subject Areas	Hours Per Day	Total Hours	Sem. Credit	Total Weeks
Electronic Health Records II	4	40	3.32	2
Medical Coding II	4	40		2

## MODULE 8

Subject Areas	Hours Per Day	Total Hours	Sem. Credit	Total Weeks
NCCT Preparation Course (NCMOA)	4	80	4.22	4
			4.33	

## MODULE 9

Subject Areas	Hours Per Day	Total Hours	Sem. Credit	Total Weeks
NCCT Preparation Course (NCICS)	4	80	3.99	4

## MODULE 10

Subject Areas	Hours Per Day	Total Hours	Sem. Credit	Total Weeks
Externship for HIT	8	160	5.54	4
Career Development	4	40		2

## MODULE 11

Subject Areas	Hours Per Day	Total Hours	Sem. Credit	Total Weeks
U.S. History	4	60	5.15	3
MS Word/Business Ethics	4	20		1

## **MODULE 12**

Subject Areas	Hours Per Day	Total Hours	Sem. Credit	Total Weeks
Introduction to Psychology	4	60	5.15	3
MS PowerPoint/Business Ethics	4	20		1

## **MODULE 13**

Subject Areas	Hours Per Day	Total Hours	Sem. Credit	Total Weeks
Earth Science	4	60	4.87	3
MS Excel I/Business Ethics	4	20		1

## **MODULE 14**

Subject Areas	Hours Per Day	Total Hours	Sem. Credit	Total Weeks
College Math	4	60	4.87	3
MS Excel II/Business Ethics	4	20		1

## **ASSOCIATE OF SCIENCE IN CRIMINAL JUSTICE**

The objective of the AS Criminal Justice program is designed to prepare graduates for entry into state, local, or federal law enforcement, corrections, or private security. Students will study the U.S. Constitution, American court systems, Federal and California state laws, and past and current criminal trends. Students will be prepared to properly articulate, format, and complete various types of reports and professional communication. Before graduation, students will be introduced to the application process for various local, state, and federal agencies.

Students will be required to maintain personal physical fitness throughout the program and pass a standardized physical assessment before graduation. Upon completion of all theory classes, students will be required to complete a practical capstone, concentrating on real-world scenarios. Students will train with various equipment, including simulated firearms and dry-fire range, forensic testing kits (i.e., fingerprinting, blood splatter, bullet trajectory, gun powder analysis), and officer duty belts with handcuffs and attachments.

The Associate of Science is available in four different emphasis areas. Students are required to choose one emphasis path in either Crime Scene Investigations, Corrections, Homeland Security, or Corporate Security.

Successful completion of this course will lead to an Associate of Science.

## **DAY/EVENING PROGRAM SCHEDULE**

36 weeks of instruction - 20 hours per week	Monday through Friday 4 hours per day
60 Total Program - Weeks	Format: T/H/DE
1200 Clock Hours / 71 Semester Credit Hours	

This program does not have a cumulative final test or examination required for the completion of the program.

Course	<b>DESCRIPTION</b> General Education	Clock Hours	Format	Sem. Credit Hours	Lecture Hours	Lab Hours
PSY 103	Introduction to Psychology	60	T/H/DE	4.00	60	0
SCI 101	Earth Science	60	T/H/DE	3.72	52	8
MTH 101	College Math	60	T/H/DE	3.72	52	8
CPA 101	Business Computer Applications	40	T/H/DE	1.99	20	20
HIS 101	U.S. History	60	T/H/DE	4.00	60	0
	SECTION TOTALS	280		17.43	244	36

Course	<b>DESCRIPTION</b> Criminal Justice & Public Safety	Clock Hours	Format	Sem. Credit Hours	Lecture Hours	Lab Hours
LS 101	Introduction to Criminal Justice	40	T/H/DE	2.66	40	0
LS 110	Criminal Law	40	T/H/DE	2.66	40	0
LS 120	Criminal Procedure and the Constitution	40	T/H/DE	2.66	40	0
LS 130	Deviance & Violence	40	T/H/DE	1.33	20	20
LS 140	Criminal Evidence	40	T/H/DE	2.33	40	0
LS 150	Gangs and Narcotics	40	T/H/DE	1.99	40	0
LS 160	American Criminal Courts	40	T/H/DE	1.99	40	0
ENG 101	Writing I	40	T/H/DE	1.99	10	30
LS 201	Communication & Report Writing	40	T/H/DE	2.66	20	20
LS 203	Public Safety Hiring Process	40	T/H/DE	2.66	20	20
CS 108	Career Development	40	T/H/DE	3.99	20	20
PHYS 101	Physical Fitness for Public Safety	40	T/H/DE	1.66	10	30

HLS 101	Introduction to Homeland Security & Terrorism	40	T/H/DE	1.66	40	0
CO 101	Introduction to Corrections	40	T/H/DE	2.66	40	0
CT 101	Principles of Investigation	40	T/H/DE	2.66	40	0
CPS 101	Introduction to Corporate Security	40	T/H/DE	2.66	40	0
STP 200	Strategic Operations Capstone	80	T/H/DE	2.66	20	60
	SECTION TOTALS	720		40.88	510	210

Course	<b>DESCRIPTION</b> Emphasis in Homeland Security	Clock Hours	Format	Sem. Credit Hours	Lecture Hours	Lab Hours
HLS 102	National Security Law	40	T/H/DE	2.66	40	0
HLS 201	Homeland Security Intelligence	40	T/H/DE	2.66	40	0
HLS 202	Confronting Terrorism & Intelligence Management	40	T/H/DE	2.66	40	0
HLS 300	Religious Extremism and Terrorism	40	T/H/DE	2.66	40	0
CPS 300	Private Sector Securities	40	T/H/DE	2.66	40	0

Course	<b>DESCRIPTION</b> <i>Emphasis in Corrections</i>	Clock Hours	Format	Sem. Credit Hours	Lecture Hours	Lab Hours
CO 102	Juvenile Justice Delinquency	40	T/H/DE	2.66	40	0
CO 201	Inmate Supervision	40	T/H/DE	2.66	40	0
CO 202	Probation and Parole	40	T/H/DE	2.66	40	0
CO 203	Sex Offenders	40	T/H/DE	2.66	40	0
CI 203	Domestic Violence	40	T/H/DE	2.66	40	0

Course	<b>DESCRIPTION</b> Emphasis in Crime Scene Investigations	Clock Hours	Format	Sem. Credit Hours	Lecture Hours	Lab Hours
CI 102	Search and Seizure	40	T/H/DE	2.66	40	0
CI 201	Crime Scene Documentation	40	T/H/DE	2.66	40	0
CI 202	Crime Scene Processing	40	T/H/DE	2.66	40	0
CI 203	Domestic Violence	40	T/H/DE	2.66	40	0
CO 203	Sex Offenders	40	T/H/DE	2.66	40	0

Course	<b>DESCRIPTION</b> <i>Emphasis in Corporate Security</i>	Clock Hours	Format	Sem. Credit Hours	Lecture Hours	Lab Hours
CPS 102	Criminal Investigations & Loss Prevention	40	T/H/DE	2.66	40	0
CPS 201	Resolving Conflict	40	T/H/DE	2.66	40	0
CPS 202	Risk & Threat Management	40	T/H/DE	2.66	40	0
CPS 300	Private Sector Securities	40	T/H/DE	2.66	40	0
HLS 300	Religious Extremism and Terrorism	40	T/H/DE	2.66	40	0

PROGRAM TOTAL	1200	71.61	954	246

## **ASSOCIATE OF SCIENCE IN CRIMINAL JUSTICE**

DAY/EVENING SCHEDULE – MONDAY – FRIDAY

## MODULE 1

Subject Areas	Hours Per Day	Total Hours	Sem. Credit	Total Weeks
Introduction to Criminal Justice	4	40	F 22	2
Criminal Law	4	40	5.32	2

## **MODULE 2**

Subject Areas	Hours Per Day	Total Hours	Sem. Credit	Total Weeks
Criminal Procedure and the Constitution	4	40	4.65	2
Deviance & Violence	4	40	4.65	2

## MODULE 3

Subject Areas	Hours Per Day	Total Hours	Sem. Credit	Total Weeks
Criminal Evidence	4	40	F 22	2
Gangs and Narcotics	4	40	5.32	2

## **MODULE 4**

Subject Areas	Hours Per Day	Total Hours	Sem. Credit	Total Weeks
American Criminal Courts	4	40	4.65	2
Communication & Report Writing	4	40		2

## **MODULE 5**

Subject Areas	Hours Per Day	<b>Total Hours</b>	Sem. Credit	Total Weeks
Public Safety Hiring Process	4	40	3.98	2
Career Development	4	40		2

## **MODULE 6**

Subject Areas	Hours Per Day	<b>Total Hours</b>	Sem. Credit	Total Weeks
Introduction to Homeland Security & Terrorism	4	40	5.32	2
Introduction to Corrections	4	40		2

## **MODULE 7**

Subject Areas	Hours Per Day	Total Hours	Sem. Credit	Total Weeks
Principles of Investigation	4	40	5.32	2
Introduction to Corporate Security	4	40		2

## MODULE 8

Subject Areas	Hours Per Day	Total Hours	Sem. Credit	Total Weeks
Physical Fitness for Public Safety	4	40	3.32	2
Writing I	4	40		2

## **MODULE 9**

Subject Areas	Hours Per Day	Total Hours	Sem. Credit	Total Weeks
Strategic Operations Capstone	4	80	3.99	4

## **MODULE 10** (Emphasis in Crime Scene Investigations)

Subject Areas	Hours Per Day	Total Hours	Sem. Credit	Total Weeks
Search and Seizure	4	40	5.32	2
Crime Scene Documentation	4	40		2

## **MODULE 11** (Emphasis in Crime Scene Investigations/ Emphasis in Corrections)

Subject Areas	Hours Per Day	Total Hours	Sem. Credit	Total Weeks
Domestic Violence	4	40	3.32	2
Sex Offenders	4	40		2

## **MODULE 12** (Emphasis in Crime Scene Investigations)

Subject Areas	Hours Per Day	Total Hours	Sem. Credit	Total Weeks
Crime Scene Processing	4	40	2.66	2

## **MODULE 13**

Subject Areas	Hours Per Day	Total Hours	Sem. Credit	Total Weeks
U.S. History	4	60	5.15	3
MS Word/Business Ethics	4	20		1

## **MODULE 14**

Subject Areas	Hours Per Day	Total Hours	Sem. Credit	Total Weeks
Introduction to Psychology	4	60	5.15	3
MS PowerPoint/Business Ethics	4	20		1

## **MODULE 15**

Subject Areas	Hours Per Day	Total Hours	Sem. Credit	Total Weeks
Earth Science	4	60	4.87	3
MS Excel I/Business Ethics	4	20		1

## **MODULE 16**

Subject Areas	Hours Per Day	Total Hours	Sem. Credit	Total Weeks
College Math	4	60	4.87	3
MS Excel II/Business Ethics	4	20		1

## **General Education Course Descriptions**

#### **BE 101** Business Ethics

This course will focus on ethical issues and scenarios that relate directly to employees and their work environment. Students will develop a clearer sense of how, as a future employee, their corporate code of ethics will relate to operational decisions made daily. Focus will be placed on organizational ethics, corporate social responsibility, corporate governance, role of government, blowing the whistle, and ethics and technology.

## **Course Objectives:**

- 1. Define ethics, business ethics, organizational ethics, and know the difference between the three.
- 2. Identify ethical challenges in an organization.
- 3. Understand the role of HR in an organization as it relates to a corporate code of ethics.
- 4. Describe and explain Corporate Social Responsibility (CSR) and the five driving forces behind it.
- 5. Explain the term corporate governance.
- 6. Identify the five key pieces of U.S. legislation regulating illegal conduct within organizations.
- 7. Explain the term 'whistle-blower' and the difference between internal and external whistle blowing.
- 8. Understand the different motivations of whistle blowers and identify the consequences of ignoring their concerns.
- 9. Evaluate the ethical consequences of recent technological advances.
- 10. Explain the difference between the Employer versus the Employee view of privacy at work.
- 11. Apply knowledge of Business Ethics to daily decisions made in the work environment.

## **Course Competencies:**

Pass a comprehensive exam on Business Ethics.

#### **CPA 101** Business Computer Applications

This course provides an overview of current software packages used in the business environment. Students will learn to create, edit, print, and save effective documents using word processing software as well as the basics of creating a graphical slide show using presentation software. Instruction will include using software to create and edit spreadsheets with embedded charts and graphs. Real world application projects will test students' skills in these applications.

#### **Course Objectives:**

- Create/save/edit basic MSWord documents.
- 2. Format text in document including font size/style/color, and headings.
- 3. Format document including margins, paragraph alignment, tabs/indents, page breaks, and bullets.
- 4. Create/save/edit presentations in PowerPoint.
- 5. Insert graphics into a PowerPoint presentation.
- 6. Insert notes into a PowerPoint presentation.
- 7. Print PowerPoint presentation.
- 8. Create/save/edit basic worksheets in MS Excel.
- 9. Use AutoSum, AVG, MIN, and MAX formulas to perform calculations.
- 10. Create multiple worksheet workbooks in MS Excel.
- 11. Insert Charts/Graphs into worksheets.
- 12. Format and organize worksheets.

#### **Course Competencies:**

1. Produce a written paper on a current Business Ethics topic using MS Word.

- 2. Produce and demonstrate a PowerPoint presentation on a Psychology topic.
- 3. Produce an Excel spreadsheet that analyzes extreme weather pattern data.
- 4. Create a workbook that includes multiple worksheets and recreate a graph from given data.

## **HIS 101** U.S. History

This course presents a general overview of the history of the United States from pre-colonial times through the Reconstruction Era. It explores the cultural, political, geographical, economical, and technological changes that have shaped the United States as a nation. Through a chronological study of major events, people, and turning points in U.S. history, this course also provides tools for the critical thinking skills needed to interpret historical methods, points of view, and the meanings of events in historical contexts.

## **Course Objectives:**

- 1. Identify major events and turning points in U.S. history.
- 2. Describe the changes and conflicts that occurred following European contact with the Americas.
- 3. Discover the contributions of influential cultures and individuals on the American way of life.
- 4. Associate the causes, effects, and significance of the American Revolution with moments of historical importance before and after the war.
- 5. Outline key themes in the United States Constitution.
- 6. Interpret the causes, conduct, and legacy of the American Civil War.
- 7. Demonstrate an understanding of the lasting legacies of U.S. slavery.
- 8. Chart how the growth of industry changed the United States.
- 9. Give examples of the successes and failures of Reconstruction.
- 10. Relate contemporary issues and problems to their respective histories.

### **Course Competencies:**

Pass a comprehensive exam on U.S. History.

## MTH 101 College Math

This course covers basic mathematical topics in college math through everyday applications. The course first reviews fundamental math concepts such as whole numbers, fractions and mixed numbers, and decimals and then applies them to ratio, rate, proportion, and percent problems. Students will also be introduced to basic algebra concepts including simplifying, factoring, combining, and evaluating algebraic expressions.

#### **Course Objectives:**

- 1. Employ the scientific method.
- 2. Solve equations involving fractions and mixed numbers.
- 3. Solve ratio, rate, proportion, and percent word problems.
- 4. Solve single variable algebraic equations.

#### **Course Competencies:**

Pass a comprehensive exam on college math.

## PSY 103 Introduction to Psychology

This course provides broad coverage of the field of psychology, introducing the basic concepts, theories, and applications that constitute the discipline. Topics covered include: sensation and perception, sleep and dreams, classical and operant conditioning, foundations of memory, motivation and emotion, nature and nurture, and personality.

#### **Course Objectives:**

1. Define the science of psychology.

- 2. Describe the subfields of psychology.
- 3. Explain the roots of psychology.
- 4. Discuss today's perspectives on psychology.
- 5. Identify key issues and controversies in psychology.
- 6. Define the scientific method and list the steps involved.
- 7. Explain the difference between Descriptive, Experimental, and Psychological Research.
- 8. Explain the major ethical issues in psychological research.
- 9. Explain the five senses and how they relate to psychology.
- 10. Explain the gestalt laws of organization.
- 11. Differentiate the explanations of dreaming.
- 12. Describe the basics of classical conditioning.
- 13. Describe the basics of operant conditioning.
- 14. Explain the difference between latent and observational learning.
- 15. Define sensory memory, short-term memory, and long-term memory.
- 16. Explain the processes of recall and forgetting.
- 17. Explain the five approaches to motivation.
- 18. Apply Maslow's hierarchy of needs to motivation.
- 19. Compare and contrast the influence of nature versus nurture.
- 20. Explain Freud's psychoanalytic theory.

## **Course Competencies:**

Pass a comprehensive exam on Psychology.

## **SCI 101** Earth Science

This course introduces fundamental scientific concepts in Earth Science. Students will explore a broad spectrum of earth science topics from Earth's position in the solar system to the delicate ecological systems on Earth's surface. Topics covered include: the scientific method, motions of earth, earth materials, plate tectonics, earthquakes, weathering, erosion, winds, atmosphere, weather, climate, oceans, and ecology and the environment.

#### **Course Objectives:**

- 1. Understand the life cycle of a star.
- 2. Understand the life cycle of a galaxy.
- 3. Explain the differences between a planet, moon, and small solar system bodies.
- 4. Know the planets in the Solar System.
- 5. Describe the stages of the origin of the solar system.
- 6. Describe the motions of the Earth.
- 7. Describe the phases of the Moon.
- 8. Know the difference between a sun and a moon eclipse.
- 9. Describe the three different types of rocks.
- 10. Describe the layers of the Earth.
- 11. Define plate tectonics.
- 12. Describe the five processes that shape the Earth's surface.
- 13. Describe the composition of the atmosphere.
- 14. Describe evaporation, condensation, and air saturation.
- 15. Know the major weather producers.
- 16. Explain the major climate groups.
- 17. Describe the different types of water on Earth's surface.
- 18. Explain the hydrologic cycle.
- 19. Explain the movement of seawater.

### **Course Competencies:**

## **FFP 103** Advanced - Fiber to the Premises (FTTx/CFOS-H)

Students in this course will learn why FTTx is being implemented today, including technical, marketing and financial justifications; the types of FTTx architectures being used, advantages and disadvantages of each and types of components required; Technical details of specialized FTTx components like splitters and wavelength-division multiplexers and requirements for cables, connectors, splices and hardware; the design and installation requirements particular to FTTx; and the specialized safety requirements of FTTx. Hands on labs examine testing and troubleshooting FTTx links.

## **Course Objectives:**

- 1. Develop a knowledge of types of FTTx (FTTC (curb, also sometimes FTTN for node), FTTH (home), FTTP (premises), etc.
- 2. Identify advantages and disadvantages of each type of FTTx and FTTH architectures.
- 3. Understand the differences between PONs and traditional fiber networks.
- 4. Identify specialized safety requirements of FTTx.

#### **Course Competencies:**

- 1. Demonstrate the ability recognize requirements for design, installation, testing and troubleshooting FTTx links.
- 2. Pass a comprehensive exam on FOA CFOS/H standards.

## FFP 104 Advanced Fiber Optics - Splicing (CFOS-S)

The Advanced Fiber Optics Module builds on concepts and theories learned in Basic Fiber Optics. It is designed to give students a closer look at cable splicing techniques like mechanical splicing, single fiber fusion splicing, multi-fiber ribbon splicing as well as intensive hands on learning with industry standard equipment. Also, students will learn to identify various splicing applications, various splice enclosures, splicing errors, and acceptable splices.

#### **Course Objectives:**

- 1. Develop a knowledge of fusion splicing methodology and preparation for single and ribbon fibers
- 2. Understand the fundamentals of optical time domain reflectometers (OTDR) testing.
- 3. Identify specialized safety requirements of CFOS/S.

#### **Course Competencies:**

- 1. Demonstrate proper fiber preparation and fusion splicing.
- 2. Pass a comprehensive exam on FOA CFOS/S standards.

## FFP 105 Advanced Fiber Optics - Testing (CFOS-T)

The Advanced Fiber Optics Module builds on concepts and theories learned in Basic Fiber Optics. It is designed to give students a closer look at cable types and splicing as well as intensive hands on learning with industry standard equipment. Also, students will be introduced to function and use of an optical time domain reflectometer (OTDR) as used for fiber optics testing

#### **Course Objectives:**

- 1. Understand how to visually Inspect of connectors and proper clean fibers.
- 2. Understand the testing fundamentals and techniques required for continuity, visual tracing, and visual fault location.
- 3. Explain methodology of power budgeting and the insertion of loss testing.

## **Course Competencies:**

- 1. Demonstrate proper fiber optic testing utilizing the ODTR.
- 2. Pass a comprehensive exam on FOA CFOS/T standards.

## **FO 101** Basic Fiber Optics

The Basic Fiber Optics Installation Technology course is an introduction to fiber optics. It is designed to provide students with knowledge of the fundamentals of lightwave technology, basic optical theory, optical fiber technology, components & connectors, the splicing process, fiber optics applications, optical signals, system performance measurements and proper fiber optic lab safety.

## **Course Objectives:**

- 1. Develop a knowledge of basic fiber optics.
- 2. Understand the fiber optic communication networks and applications.
- 3. Identify techniques used for proper fiber preparation and cable pulling.
- 4. Identify methods of fiber optic termination, splicing, and testing.

## **Course Competencies:**

- 1. Demonstrate proper fiber and cable preparation.
- 2. Pass a comprehensive exam on FOA CFOT standards.

## FO 201 Advanced Fiber Optics - Fiber to the Premises (FTTx/CFOS-H)

Students in this course will learn why FTTx is being implemented today, including technical, marketing and financial justifications; the types of FTTx architectures being used, advantages and disadvantages of each and types of components required; Technical details of specialized FTTx components like splitters and wavelength-division multiplexers and requirements for cables, connectors, splices and hardware; the design and installation requirements particular to FTTx; and the specialized safety requirements of FTTx. Hands on labs examine testing and troubleshooting FTTx links.

#### **Course Objectives:**

- 1. Know the characteristics of the following networks: Ethernet, FDDI, ESCON, SONET, PON and WDM PON.
- 2. Be able to work with FTTx components such as: Routers, modulators, tunable lasers, digital televisions, etc.
- 3. Understand the site requirements for FTTx installation.
- 4. Ability to use an OLTS.
- 5. Ability to comply with the OFSTP-14, NEC Article 770 and industry standards (EIA/TIA and ITU.)
- 6. Know the rules for fiber distribution, backbone cabling, and homerun or centralized fiber cabling.

#### **Course Competencies:**

- 1. Terminate SM fiber optic cable and test with OLTS.
- 2. Terminate MM fiber optic cable and test with OLTS.
- 3. Design a fiber optic link using FTTx components and test using all previously covered testing options (OLTS, OTDR, and VFL).
- 4. Pass comprehensive exam based on FOA's CFOS/H certification standards.

## FO 202 Testing (CFOS-T)

This course is a continuation of Advanced Fiber Optics. Students will sharpen their fiber optics skills to become specialists in Fiber Optics Testing. Topics include: using power budgets to estimate loss when testing to verify results; modal effects on loss, using mode modifiers, standards requirements for mandrel wrap and source modal launch; using light source/power meter to make insertion loss tests, effects of launch cables, wavelength, 3 methods of setting "0 dB" reference; using OTDRs, using launch and/or receive cables, setting test parameters to get best results, bidirectional differences, ghosts, etc.; troubleshooting with VFL, source/PM, OTDR

### **Course Objectives:**

- 1. Understand and perform Link Loss Budget.
- 2. Be able to comply with all fiber optics testing procedures and standards at an advanced level.

#### **Course Competencies:**

- 1. Terminate fiber optic cable using anaerobic and epoxy methods.
- 2. Test fiber optics link using manual OTDR settings.
- 3. Find faults and repair fiber optics link.
- 4. Pass comprehensive exam based on FOA's CFOS/T certification standards.

## **FO 203** Fiber to the Premises (FTTx)

Students in this course will learn why FTTx is being implemented today, including technical, marketing and financial justifications; the types of FTTx architectures being used, advantages and disadvantages of each and types of components required; Technical details of specialized FTTx components like splitters and wavelength-division multiplexers and requirements for cables, connectors, splices and hardware; the design and installation requirements particular to FTTx; and the specialized safety requirements of FTTx. Hands on labs examine testing and troubleshooting FTTx links.

#### **Course Objectives:**

- 1. Develop a knowledge of types of FTTx, FTTC, FTTH (home), FTTP (premises), etc.
- 2. Identify advantages and disadvantages of each type of FTTx and FTTH architectures.
- 3. Understand the differences between PONs and traditional fiber networks.
- 4. Identify specialized safety requirements of FTTx.

#### **Course Competencies:**

- 1. Demonstrate the ability recognize requirements for design, installation, testing and troubleshooting FTTx links.
- 2. Pass a comprehensive exam on FOA CFOS/H standards.

## **FO 206** Advanced Fiber Optics - Splicing (CFOS-S)

The Advanced Fiber Optics Module builds on concepts and theories learned in Basic Fiber Optics. It is designed to give students a closer look at cable types and splicing as well as intensive hands on learning with industry standard equipment. Also, students will be introduced to function and use of an optical time domain reflectometer (OTDR) as used for fiber optics testing.

#### **Course Objectives:**

- 1. Understand power loss testing on fiber optic cables using OFSTP14/OFSTP-7/FOTP-95/OFTP-171 Methods A, B, and C.
- 2. Understand fusion and mechanical splicing.
- 3. Advanced knowledge of fiber optic equipment including power loss test sets and OTDRs.

#### **Course Competencies:**

- 1. Terminate fiber optic cable
- 2. Perform two splices (fusion and mechanical) on fiber optic cable, test for loss, and analyze results.
- 3. Pass comprehensive exam based on FOA's CFOS/S certification standards.

#### MAD 110 Mobile Application Development

This course focuses on the creation of applications for use on mobile platforms. Students will focus on specific features and resources for application development on Android and iOS devices.

#### **Course Objectives:**

1. Identify various data, location, and memory requirements specific to mobile devices.

2. Recognize user interface designs used for mobile applications.

## **Course Competencies:**

- 1. Pass a comprehensive exam on mobile application development.
- 2. Create a functioning application on an Android device.

## PEAR 200 Pearson Certification Preparation Course

This course prepares students to take the Pearson IT Specialist Certification Bundle-Software Development and covers the concepts, principles, and elements that are essential for web application, including algorithms, functional programing patterns, databases, and various programming languages. Software development principles and how to put them into practice in each start of software development.

## **Course Objectives:**

- 1. Solve programming problems using algorithm and flowcharts.
- 2. Understand the software development life cycle (SDLC)
- **3.** Translate project requirements into code deliverables.
- 4. Correctly use encapsulation within classes for secure coding
- **5.** Identify the elements within a website application architecture.
- **6.** Query a database.

## 1. Course Competencies:

Pass a comprehensive exam based on Pearson Certification standards.

## OOP 101 Object-Oriented Programming 20 Hours Lecture 20 Lab 0

This course provides an overview of object-oriented programming languages and defines the standard purpose for each language discussed. The course will explain object-oriented programming concepts of inheritance, polymorphism, abstraction, and encapsulation.

## **Course Objectives:**

Identify the object-oriented programming concepts discussed in class.

#### **Course Competencies:**

Pass a comprehensive exam on object-oriented programming.

#### OOP 120 C#/C++ Programming Language 60 Hours Lecture 20 Lab 40

This course provides a detailed look at the object-orientated programming C# (C-sharp) and C++ languages. Students will be prepared using industry best practices to create high quality C language code. The course will include project conception, design, implementation, and testing.

#### **Course Objectives:**

- 1. Familiarization of object-oriented concepts and syntax specific to the C languages.
- 2. Define terms related to C#/C++ programming, to include: Preprocessor Commands, Functions, Variables, Statements & Expressions, and Comments.

## **Course Competencies:**

- 1. Pass a comprehensive exam on C#/C++ programming.
- 2. Create a program using the C language.

## OOP 130 Java Programming

This course provides a hands-on experience with the object-orientated programming language of Java. Students will be prepared using industry best practices to create high quality Java code. The course will include project conception, design, implementation and testing.

## **Course Objectives:**

- 1. Familiarization of object-oriented concepts and syntax specific to the Java language.
- 2. Define terms related to Java programming, to include: Object, Class, Inheritance, Interface, Package.

## **Course Competencies:**

- 1. Pass a comprehensive exam on Java programming.
- 2. Create a program using the Java language.

## PLDP 101 Core Programming Logic & Design Principles

This course introduces programming logic, control statements, and program flow. Students will be given the skills to understand programming structure; including sequence, selection, and repetition. The student will learn problem analysis and methods of algorithm application to solve the scenario.

### **Course Objectives:**

- 1. Understand the fundamentals of programming logic.
- 2. Identify control statements and basic programming structure.
- 3. Recognize the steps necessary to create an algorithm capable of solving a given problem.

#### **Course Competencies:**

1. Pass a comprehensive exam on programming logic and design principles.

## PIP 101 Basic Programming with Python

This course provides an overview of programming in the Python language. The course will explain Python programming concepts of Designing a Program, Input, Processing, and Output, Variables, Reading Keyboard Input, performing calculations and Named Constants. Also, Decision Structures and Boolean Logic, Repetition Structures, Functions, Files and Exceptions, Lists and Tuples, Strings and Dictionaries, and Sets.

## **Course Objectives:**

- 7. Identify the Python programming concepts discussed in class.
- 8. Understand essential elements required for program design.

## **Course Competencies:**

- 1. Pass a comprehensive exam on the Python programming language.
- 2. Develop a Python based program.

## **SDC 200** Software Development Capstone Project

This course will build upon the fundamental concepts of software development learned throughout the program in a comprehensive capstone project. Students will use the skill sets acquired in the program to design and build a software solution to meet the given scenario. Students will be assigned to groups with milestones to meet throughout the course.

## **Course Objectives:**

- 1. Understand the fundamentals of software development.
- 2. Identify the various hardware and software utilized by software programmers.
- 3. Recognize the difference between given programming interfaces/environments.

4. Enhance project management skills through deadlines and goals.

## **Course Competencies:**

- 1. Meet milestone and goal markers.
- 2. Complete a scenario-based project to create a high-quality consumer ready IT solution.

## **SDP 101** Introduction to Programming 20 Hours Lecture 20 Lab 0

This course provides an introduction to how programs are created using software languages. Students will progress through Microsoft Hour of Code TM labs to understand key concepts of programming languages and syntaxes.

## **Course Objectives:**

- 1. Recognize various language syntaxes through coding exercises.
- 2. Familiarization with App Lab programming environment.

## **Course Competencies:**

1. Complete 8 coding labs.

#### SDPM 101 Intro to Software Development & Project Management

This course provides an overview to computer programming and software development. Students will be introduced to various computer operating systems, hardware, software and programming environments. An Emphasis is placed on planning, design, development, implementation, and testing of an application. Methods to utilize input–process—output (IPO) charts, pseudocode, and flowcharts with be introduced to assist with application development. Additionally, the course will discuss the health and safety of continuous computer usage and methods to lessen risk factors.

## **Course Objectives:**

- 1. Understand the fundamentals of software development.
- 2. Identify the various hardware and software utilized by software programmers.
- 3. Recognize the difference between given programming interfaces/environments.

#### **Course Competencies:**

- 1. Pass a compressive exam on the basics of software development.
- 2. Complete a scenario-based exam on project management.

## SSWA 104 Server-Side Web Application 80 Hours Lecture 40 Lab 40

This course introduces scripting for server-side web applications. The topics includes in this course are REST and SDK APIs, Microsoft Azure services, Ruby, PHP, and ASP.NET.

## **Course Objectives:**

- 1. Identify the function of server-side web applications.
- 2. Recognize the various scripting languages presented in class.

## **Course Competencies:**

- 1. Pass a comprehensive exam on server-side web applications.
- 2. Create a server-side web script based on theory discussed in lecture.

## SQL 104 Understanding SQL and Databases 80 Hours Lecture 40 Lab 40

This course provides an understanding of Structured Query Language (SQL) and databases. The course will cover data management and database creation of a relational database management system (RDBMS). The basics of the SQL language will be discussed in order to access and retrieve data within the database. The implications of database security will be discussed.

# **Course Objectives:**

- 1. Describe the organization of an RDBMS database.
- 2. Understand the fundamentals and commands for the Structured Query Language (SQL).

# **Course Competencies:**

Pass a comprehensive exam on SQL and databases.

# TSS 112 Testing and Security

60 Hours

Lecture 20 Lab 40

This course introduces software engineering techniques for developing software products and apps. Topics covered include personas and scenarios, cloud-based software, microservices, security and privacy and DevOps.

# **Course Objectives:**

- 1. Recognize key concepts of Cyber Security, Best Practices, and Standards.
- 2. Identify barriers to successful application deployment with proper testing techniques.

# **Course Competencies:**

1. Pass a comprehensive exam on Security and Testing.

# WEB 101 Web Development

This course introduces the student to web-based programming languages/scripts and focuses on internet fundamentals. Students will be able to create a web interface utilizing HTML/HTML5, CSS/CSS3, and PHP. The course will additionally introduce content management systems (CMS), especially WordPress.

# **Course Objectives:**

- 1. Identify the scripting languages used in web design.
- 2. Recognize the correct syntax utilized in creating web pages.
- 3. Understand differences in web design techniques and streamline customer design with a CMS.

# **Course Competencies:**

- 1. Pass a comprehensive exam on web development.
- 2. Create a website using techniques developed from the classroom lecture.

# **TRD 101** HVAC Trade Skills Core Concepts

#### **Course Description:**

This module will provide instruction in basic core HVAC skills, basic construction math, safety, HVAC tools, and materiel handing. Additionally, instruction on how to communicate effectively and clearly in a professional manner.

# **Learning Objectives:**

LO1.1 Understand basic trade skills of HVAC.

LO1.2 Identify HVAC tool, materials, and safety.

- PT1.1 Be able to identify and safely handle HVAC tools and materials.
- PT1.2 Communicate in a professional, reliable manner with customer service scenarios.
- CC1.1 Pass a comprehensive exam in HVAC Trade Skills Concepts learning objectives.

# CS 105/107 Career Development for HVAC Technicians

# **Course Description:**

This module will provide instruction on interviewing techniques and on-the-job career development, i.e., negotiating salary and job performance reviews. Resume development and writing tips. Exercises will include creating a personal resume for the student to use in his/her job search.

# **Learning Objectives:**

- LO1.1 Understand effective interviewing techniques.
- LO1.2 Identify how to create a professional resume and cover letter.

# **Course Competencies & Performance Tasks:**

- PT1.1 Complete a mock interview with Career Advisor.
- PT1.2 Develop a professional resume with Career Advisor and submit to three job postings.
- CC1.1 Pass a comprehensive exam based on Career Development learning objectives.

# **HVAC 110/112** Air Distribution, Venting, Maintenance, and Air Conditioning

This module will be divided into four topics:

- 1. Covers the basic principles of heating, ventilating, and air conditioning, career opportunities in HVAC, and how apprenticeship programs are constructed. Basic safety principles, as well as trade licensure and EPA guidelines, are also introduced. (03101)
- 2. Explains how to solve HVAC/R trade related problems involving the measurement of lines, area, volume, weights, angles, pressure, vacuum, and temperature. Also includes a review of scientific notation, powers, roots, and basic algebra and geometry. (03102)
- 3. Explains the fundamental operating concepts of the refrigeration cycle and identifies both primary and secondary components found in typical HVAC/R systems. Common refrigerants are introduced as well. Describes the principles of heat transfer and the essential pressure temperature relationships of refrigerants. Basic control concepts for simple systems are also introduced. (03107)
- 4. Describes the factors related to air movement and its measurement in common air distribution systems. The required mechanical equipment and materials used to create air distribution systems are also presented. Basic system design principles for both hot and cold climates are introduced. (03109)

#### **Learning Objectives:**

- LO1.1 Explain the basic principles of heating, ventilation, air conditioning, and refrigeration.
- LO1.2 Describe the principles that guide HVACR installation and service techniques.
- LO1.3 Identify career paths available in the HVACR trade.
- LO2.1 Convert units of measurement from the inch-pound system to the metric system, and vice-versa.
- LO2.2 Solve basic algebra equations.
- LO2.3 Identify and describe geometric figures.
- LO3.1 Explain the fundamental concepts of the refrigeration cycle.
- LO3.2 Identify common refrigerants and their identifying characteristics.
- LO3.3 Identify the major components of cooling systems and how they function.
- LO3.4 Identify common controls used in cooling systems and how they function.

- LO4.1 Describe the factors related to air movement and its measurement in air distribution systems.
- LO4.2 Describe the mechanical equipment and materials used to create air distribution systems.
- LO4.3 Identify the different approaches to air distribution system design and energy conservation.

## **Course Competencies & Performance Tasks:**

- PT3.1 Measure temperatures in an operating cooling system.
- PT3.2 Calibrate a set of refrigerant gauges and thermometers.
- PT3.3 Connect a refrigerant gauge manifold and properly calculate subcooling and superheat on an operating system using a temperature probe.
- PT3.4 Identify refrigerants using cylinder color codes.5. Identify compressors, condensers, evaporators, metering devices, controls, and accessories.
- PT4.1 Use a manometer to measure static pressure in a duct system.
- PT4.2 Use a velometer to measure the velocity of airflow at the output of air system supply diffusers and registers.
- PT4.3 Use a velometer to calculate system cfm.
- PT4.4 Read and interpret equivalent length charts and required air volume/duct size charts.
- CC1.1 Pass a comprehensive exam based on *Introduction to HVAC* learning objectives.
- CC1.2 Pass a comprehensive exam based on *Trade Mathematics* learning objectives.
- CC1.3 Pass a comprehensive exam based on *Introduction to Cooling* learning objectives.
- CC1.4 Pass a comprehensive exam based on Air Distribution Systems learning objectives.

# HVAC 120/122 Electronics and Control Circuit Troubleshooting

This module will be divided into three topics:

- 1. Introduces the concept of power generation and distribution, common electrical components, AC and DC circuits, and electrical safety as it relates to the HVAC field. Introduces reading and interpreting wiring diagrams. (03106)
- 2. Presents the basic concepts of alternating current generation and use. It also discusses how single- and three-phase alternating current is used to power resistive and inductive circuits in HVAC/R equipment. Various types of transformers used in HVAC systems are identified. The basic operation of single- and three-phase motors is explained. In addition, the process of safely testing AC-powered devices is covered. (03206)
- 3. Provides information and skills to troubleshoot control circuits and electric motors found in heating and cooling equipment. Technicians must have an understanding of how the various components function and be able to interpret the schematics, wiring diagrams, and other service literature. (03314 & 03309-08)

#### **Learning Objectives:**

- LO1.1 Describe the fundamentals of electricity.
- LO1.2 Explain basic electrical theory.
- LO1.3 Identify the electrical measuring instruments used in HVACR work and describe their uses.
- LO1.4 Identify electrical components used in HVACR systems and describe their functions.
- LO2.1 Explain how AC power is generated and how it is used.
- LO2.2 Explain how transformers operate and identify various types of transformers used in HVAC systems.
- LO2.3 Explain the various types of induction motors and explain how they operate.
- LO2.4 Explain how to safely test various AC-powered devices.
- LO3.1 Identify and describe the operation of common HVACR control circuit devices.
- LO3.2 Describe the operation, installation, and testing of various thermostats and temperature controls.
- LO3.3 Explain how to troubleshoot common control circuits and load components.

- LO3.4 Describe the operation of variable frequency drives (VFD) and their selection considerations.
- LO3.5 Identify and describe how to service electronically commutated motors (ECMs).
- LO4.1 Describe the similarities and differences be-tween electronic controls and conventional controls.
- LO4.2 Analyze circuit diagrams and other manufacturers' literature to determine the operating sequence of microprocessor-controlled systems.
- LO4.3 Use test equipment to diagnose a microprocessor-controlled comfort system.

# **Course Competencies & Performance Tasks:**

- PT1.1 Use the proper instrument to measure voltage in an energized circuit.
- PT1.2 Use the proper instrument to measure current in an energized circuit.
- PT1.3 Use the proper instrument to measure resistance.
- PT1.4 Use a multimeter to check circuit continuity.
- PT1.5 Assemble and test low- and high-voltage series and parallel circuits using a transformer and selected control and load devices.
- PT2.1 Point out the components used in a functional AC power supply circuit and explain their functions.
- PT2.2 Following applicable safety practices, test AC components, including transformers, capacitors, and motor windings.
- PT3.1 Wire, check the operation of, and adjust the cycle rate of a thermostat.
- PT3.2 Interpret control circuit diagrams.
- PT3.3 Perform electrical tests and/or troubleshooting procedures on the following: single- and three-phase power sources, fuses and circuit breakers, resistive loads, relays and/or contactors, motor windings, start and run capacitors, start relays and thermistors.
- CC1.1 Pass a comprehensive exam based on Basic Electricity learning objectives.
- CC1.2 Pass a comprehensive exam based on Alternating Current learning objectives.
- CC1.3 Pass a comprehensive exam based on *Control Circuit and Motor Troubleshooting* learning objectives.
- CC1.4 Pass a comprehensive exam based on *Troubleshooting Electronic Controls* learning objectives.

# HVAC 130/132 Electric Heat, Accessories, Metering, and Compressors

This module will be divided into five topics:

- Covers the fundamentals of heating systems and the combustion process. The different types and designs of gas furnaces and their components, as well as basic procedures for their installation and service, is provided. (03108)
- 2. Presents refrigerant compressors. Since the compressor is considered the heart of any HVAC system, its good health and well-being are crucial to overall system performance and reliability. Compressors can take many forms, but they all perform the same basic function. They create the pressure differential in the system that allows refrigerant to move through the metering device and through the condenser and evaporator coils where heat is exchanged. Because the compressor is the most expensive component in most HVAC systems, it is important that technicians be able to correctly diagnose and correct problems that can affect compressor operation to avoid a costly compressor replacement. (03302)
- 3. Introduces metering devices used in the mechanical refrigeration cycle. The primary function of metering devices is presented, along with related components such as the distributor. The operation of capillary tube, fixed-orifice, and expansion-type metering devices is explored in detail. In addition, the process of selecting and installing thermal expansion valves specifically is covered. (03303)

- 4. Delivers information and skills needed to troubleshoot various air treatment accessories used with heating and cooling equipment. (03312)
- 5. Covers air properties and gas laws, as well as the use of psychrometric charts. Describes the tools, instruments, and procedures used to balance an air distribution system. (03402)

- LO1.1 Explain the fundamental concepts of heating and combustion.
- LO1.2 Describe the role of forced-air gas furnaces in residential heating.
- LO1.3 Describe hydronic and electric heating systems.
- LO2.1 Identify and describe the operating characteristics of various compressor types.
- LO2.2 Identify and describe various approaches to compressor capacity control.
- LO2.3 Describe the common causes of compressor failures.
- LO2.4 Identify and explain the operation of various motor overload protection and compressor protection devices.
- LO2.5 Explain how to analyze the operation of a hermetic compressor.
- LO3.1 Explain the function of refrigerant metering devices and their effect on refrigerants.
- LO3.2 Identify fixed metering devices and explain how they function.
- LO3.3 Identify types of expansion valves and explain how they operate.
- LO3.4 Explain how thermal expansion valves are selected and installed.
- LO4.1 Describe how to troubleshoot various HVAC system accessories.
- LO4.2 Describe how to troubleshoot accessories related to the introduction of outside air.
- LO5.1 Describe the properties of air and the laws related to its temperature, pressure, and volume.
- LO5.2 Describe the study of psychrometrics and how to use the psychrometric chart.
- LO5.3 Describe the air balancing process and identify the required tools and instruments.
- LO5.4 Explain how to balance an air distribution system.

- PT1.1 Identify the components of induced-draft and condensing furnaces and describe their functions.
- PT1.2 Perform common maintenance tasks on a gas furnace, including air filter replacement and temperature measurements.
- PT2.1 Use an acid/moisture test kit to test a refrigerant circuit.
- PT2.2 Measure and record the electrical and mechanical operating parameters of an operational compressor.
- PT3.1 Replace the orifice piston in a piston-type metering device.
- PT3.2 Install an externally equalized expansion valve, correctly placing the sensing bulb and equalizer tube.
- PT3.3 Calculate superheat and adjust an expansion valve to obtain the correct superheat.
- PT4.1 Using the correct tools and circuit diagrams, isolate and correct malfunctions in selected accessories.
- PT5.1 Select and properly use test instruments for balancing air distribution systems.
- PT5.2 Measure the temperature rise and drop across ducted heating and cooling equipment.
- PT5.3 Adjust supply fan speed to provide higher or lower air quantities.
- PT5.4 Measure airflow at air supply outlets.
- PT5.5 Adjust dampers in branch supply ducts and at air terminals and diffusers.
- CC1.1 Pass a comprehensive exam based on *Introduction to Heating* learning objectives.
- CC1.2 Pass a comprehensive exam based on *Compressors* learning objectives.
- CC1.3 Pass a comprehensive exam based on *Metering Devices* learning objectives.
- CC1.4 Pass a comprehensive exam based on *Troubleshooting Accessories* learning objectives.
- CC1.5 Pass a comprehensive exam based on *System Air Balancing* learning objectives.

# **HVAC 140/142** Heat Pumps and Handling Refrigerants

This module will be divided into four topics:

- 1. Provides trainees with guidance related to servicing the refrigerant circuit of HVAC systems. The four essential service tasks—leak detection, evacuation, recovery, and charging—are covered in detail. In addition, information related to the US EPA's requirements for providing these services in an environmentally sound manner are also provided. Developing the necessary skills to provide these services are vital to the future success of trainees in the HVAC/R trade. To that end, a significant amount of this module is devoted to hands-on practice and the successful completion of its required performance tasks. (03205)
- 2. Introduces heat pumps, a very efficient form of electric heat. Compared to straight electric heat, heat pumps can consistently operate at higher energy efficiency. This module presents the operation of heat pump systems in detail with additional emphasis on the most common form of supplemental heat, electric resistance heating elements. The installation considerations of both split and packaged heat pumps systems are also reviewed. (03211)
- 3. Discusses the refrigerants and oils used in modern refrigeration and air conditioning systems. Today, new technologies and stringent environmental laws are driving changes in the HVAC industry. Older refrigerants that damage the environment are being phased out and replaced with more environmentally-friendly refrigerants. These new refrigerants often require new compressor lubricating oils. These modern refrigerants and oils also have new handling and service requirements with which technicians must be familiar. (03301)
- 4. Provides a thorough review of heat pump systems, operating cycle and troubleshooting procedures for components. (03311)

# **Learning Objectives:**

- LO1.1 Describe the equipment and approaches used to leak-test refrigerant circuits.
- LO1.2 Describe refrigerant containment and management requirements and the equipment used to recover refrigerants.
- LO1.3 Explain the related principles and identify the equipment used to evacuate refrigerant circuits.
- LO1.4 Describe the procedures for charging refrigerant circuits.
- LO2.1 Explain heat pump operating principles and their related performance ratings.
- LO2.2 Describe the operation of heat pump systems.
- LO2.3 Identify common installation practices associated with heat pumps.
- LO2.4 Describe the operation of electric heating equipment commonly used with heat pumps.
- LO3.1 Describe the desirable characteristics of refrigerants and the various applications that require these characteristics.
- LO3.2 Identify various refrigerant classifications and describe their environmental impact.
- LO3.3 Explain how to use pressure-temperature (PT) charts to calculate superheat and subcooling.
- LO3.4 Identify and describe lubricating oils and issues related to their function.
- LO3.5 Describe considerations related to refrigerant conversions.
- LO4.1 Compare heat pumps to standard cooling systems and describe their operating cycles.
- LO4.2 Describe the sequence of operation for the common operating modes.
- LO4.3 Explain how to check and/or troubleshoot various functions and components of heat pump systems.

- PT1.1 Use a mixture of nitrogen with traces of HCFC-22 refrigerant to pressurize a refrigerant system in preparation for leak testing.
- PT1.2 Using at least two of the following methods, leak-test a pressurized refrigerant circuit: Electronic leak detector, Ultrasonic leak detector, Liquids, Ultraviolet/fluorescent systems.
- PT1.3 Use a recovery unit to recover the refrigerant from a system.

- PT1.4 Evacuate a system using the deep-vacuum method and perform a vacuum leak test.
- PT1.5 Evacuate a system using the triple-evacuation method.
- PT1.6 Demonstrate how to properly charge a refrigerant circuit using the following methods: By weight, By superheat (fixed orifice metering device), By subcooling (thermostatic expansion valve metering device).
- PT2.1 Install a heat pump and complete a proper startup.
- PT3.1 Install refrigerant gauges on a functional system and calculate superheat and subcooling using the appropriate PT chart.
- PT3.2 Identify unknown refrigerants by temperature and pressure using a refrigerant gauge manifold.
- PT4.1 Demonstrate the ability to isolate and determine the solution for various electrical and mechanical malfunctions in heat pumps.
- PT4.2 Initiate the defrost cycle of a heat pump.
- CC1.1 Pass a comprehensive exam based on *Leak Detection, Evacuation, Recovery, and Charging* learning objectives.
- CC1.2 Pass a comprehensive exam based on *Heat Pumps* learning objectives.
- CC1.3 Pass a comprehensive exam based on *Refrigerants and Oils* learning objectives.
- CC1.4 Pass a comprehensive exam based on *Troubleshooting Heat Pumps* learning objectives.

# **HVAC 150/152** Maintenance and Troubleshooting

This module will be divided into three topics:

- 1. Covers information and skills needed to troubleshoot gas-fired furnaces and boilers. (03209)
- 2. Provides guidance related to troubleshooting cooling systems. (03210)
- 3. An introduction to common tasks associated with the basic maintenance of HVACR systems. Specific tasks, such as lubrication and belt installation, are discussed in detail. In addition, the module describes the general procedures for performing inspections and periodic maintenance of gas furnaces and common cooling/heat pump systems, including how to complete the required documentation. (03215)

## **Learning Objectives:**

- LO1.1 Describe how to troubleshoot the components related to gas heating.
- LO1.2 Identify infrared gas heaters and describe how they operate.
- LO1.3 Explain how to conduct a combustion analysis on a gas furnace.
- LO2.1 Describe the operation of the refrigeration cycle and identify problems that can occur.
- LO2.2 Explain how to troubleshoot and replace a compressor.
- LO3.1 Identify and describe common gaskets, packing materials, seals, and bearings.
- LO3.2 Describe the properties of common lubricants and how they are applied.
- LO3.3 Identify different types of drive belts and describe how they are installed and adjusted.
- LO3.4 Describe the inspection and/or maintenance procedures for selected equipment.

- PT1.1 Using the proper tools, instruments, and control circuit diagrams, isolate and correct malfunctions in a gas heating system.
- PT1.2 Complete a combustion analysis on a gas furnace or boiler.
- PT2.1 Demonstrate the ability to isolate and determine the solution for at least four of the following types of malfunctions: Compressor failures, System-related compressor problems, Refrigerant undercharge or overcharge, Evaporator and condenser problems, Metering device problems, Refrigerant lines and accessories, Non-condensables and refrigerant circuit contamination.
- PT3.1 Lubricate a bearing using a grease gun.
- PT3.2 Properly install, align, and adjust a drive belt.

- PT3.3 Perform an inspection and periodic maintenance on a gas furnace and document the inspection results on a checklist.
- PT3.4 Perform an inspection and periodic maintenance on a cooling or heat pump system and document the inspection results on a checklist.
- CC1.1 Pass a comprehensive exam based on *Troubleshooting Gas Heating* learning objectives.
- CC1.2 Pass a comprehensive exam based on *Troubleshooting Cooling* learning objectives.
- CC1.3 Pass a comprehensive exam based on *Basic Maintenance* learning objectives.

# **HVAC 160/162** Hydronic, Airside, and Balancing Systems

This module will be divided into six topics:

- Explains how to identify types of copper tubing and fittings used in the HVAC/R industry and how they are mechanically joined. The identification and application of various types of plastic piping, along with their common assembly and installation practices, are also presented. (03103)
- Introduces the equipment, techniques, and materials used to safely join copper tubing through both soldering and brazing. The required PPE, preparation, and work processes are covered in detail. The procedures for brazing copper to dissimilar materials are also provided. (03104)
- 3. Introduces hydronic heating systems. In hydronic heating systems, fluids (typically water) are used to transfer heat. Fuels such as gas or oil are used to heat the water in a boiler. Pumps then circulate that heated water throughout the structure where terminal devices such as radiators release the heat into different areas. (03203)
- 4. Covers sheet metal duct systems. While other materials can be used to fabricate air ducts, sheet metal has been and continues to be one of the most popular materials for this purpose. Major advantages of sheet metal ducts systems include low resistance to airflow, strength, and durability. In addition to using time-tested assembly methods, modern sheet metal duct systems need to be sealed to prevent leakage of conditioned air and insulated to prevent heat loss or heat gain through the walls of the duct. (30213)
- 5. Reviews basic properties of water and describes how water pressure is related to the movement of water through piping systems. Describes various types and components of commercial hot-water heating and chilled-water cooling systems, and examines how those systems function. (03305)
- 6. Introduces the air distribution systems used in commercial structures such as schools and office buildings that are divided into comfort heating and cooling zones. The module covers the various types of systems, as well as the air terminals and air source equipment used in these systems. Accessories commonly used with commercial systems are also covered. (03201)

- PT1.1 Cut and bend copper tubing.
- PT1.2 Safely join copper tubing using mechanical fittings.
- PT1.3 Cut and join lengths of plastic pipe.
- PT2.1 Properly set up and shut down oxyacetylene equipment.
- PT2.2 Properly set up and shut down an acetylene single tank.
- PT2.3 Properly prep and safely solder copper tubing in various planes, using various fittings.
- PT2.4 Properly prep and safely braze copper tubing using various fittings.
- PT3.1 Disassemble a hydronic circulating pump and identify its internal components.
- PT5.1 Identify the major components of commercial hot-water heating and chilled-water cooling hydronic systems.

- PT5.2 Identify the types of common piping configurations used with commercial hot-water and chilled-water hydronic systems.
- CC1.1 Pass a comprehensive exam based on *Basic Copper and Plastic Piping Practices* learning objectives.
- CC1.2 Pass a comprehensive exam based on Soldering and Brazing learning objectives.
- CC1.3 Pass a comprehensive exam based on *Introduction to Hydronic Systems* learning objectives.
- CC1.4 Pass a comprehensive exam based on *Sheet Metal Duct Systems* learning objectives.
- CC1.5 Pass a comprehensive exam based on Commercial Hydronic Systems earning objectives.
- CC1.6 Pass a comprehensive exam based on *Commercial Airside Systems* learning objectives.

- LO1.1 Recognize and identify different types of copper tubing and their related fittings.
- LO1.2 Describe and demonstrate how to join copper tubing mechanically.
- LO1.3 Recognize different types of plastic piping and show how it can be joined.
- LO2.1 Describe and demonstrate the safe process of soldering copper tubing.
- LO2.2 Describe and demonstrate the safe process of brazing copper tubing.
- LO3.1 Describe hydronic systems and the principles of closed-system water flow.
- LO3.2 Describe the primary types of hot-water heating systems and their components.
- LO3.3 Identify various hot-water heating piping systems and the terminal devices used.
- LO3.4 Describe the methods and devices used to select pumps and balance water flow in hydronic systems.
- LO4.1 Identify and describe the common types of sheet metal.
- LO4.2 Identify various methods of joining sheet metal.
- LO4.3 Describe the methods used to suspend and support sheet metal duct.
- LO4.4 Describe methods used to insulate and attenuate sheet metal duct.
- LO4.5 Identify various sheet metal duct accessories and describe their installation.
- LO4.6 Identify different types of flexible duct and explain how it is installed.
- LO5.1 Describe basic concepts related to water as a substance and its movement.
- LO5.2 Describe various commercial hot-water heating system components and subsystems.
- LO5.3 Explain the basic concepts of chilled-water systems and the related components.
- LO6.1 Describe basic commercial airside systems and their operating characteristics.
- LO6.2 Describe various approaches used in commercial air distribution.
- LO6.3 Describe common air terminal operation and related air delivery devices.
- LO6.4 Identify the characteristics and components of various airflow sources.

# **HVAC 170/172** Troubleshooting Systems and Indoor Quality Systems

This module will be divided into five topics:

- Introduces the factors related to indoor air quality and human comfort. Since humidity is a common comfort factor for all types of buildings, the equipment used to control humidity is presented in detail. The module also covers the air filtration materials and the introduction of outside air into the indoor environment. (03204)
- 2. Reviews the application and methods of fabricating fiberglass duct systems. In addition, the installation guidelines for installing a fiberglass system are presented, along with the methods to repair damaged components. The module concludes with coverage of fabric-based duct systems, which have become increasingly popular in a variety of applications. (03214)
- 3. Defines the issues associated with indoor air quality and its effect on the health and comfort of building occupants. Provides guidelines for performing an IAQ survey and covers the equipment and methods used to monitor and control indoor air quality. (03403)

- 4. Presents the procedures for the startup and shutdown of hot water, steam heating, chilled water, and air handling systems. Also covers the start-up and shutdown of typical cooling towers and packaged HVAC units. The procedures for both short- and long-term shutdowns are included. (03406)
- 5. Describes alternative devices used to reduce energy consumption, including wood, coal, and pellet fired systems, waste-oil heaters, geothermal heat pumps, solar heating, in-floor radiant heating, and direct-fired makeup units. Also introduces application-specific computer room environmental and air turnover systems. (03409)

- LO1.1 Explain the importance of indoor air quality and the factors to be controlled.
- LO1.2 Describe the processes and equipment used to control humidity levels.
- LO1.3 Describe the equipment and devices used to control air cleanliness.
- LO1.4 Identify the equipment used to provide and control the introduction of fresh air into buildings.
- LO2.1 Describe the standards and application considerations related to fiberglass duct.
- LO2.2 Describe the methods used to fabricate and repair fiberglass duct.
- LO2.3 Describe the methods used to suspend and support fiberglass duct systems.
- LO2.4 Describe fabric-based air distribution products and their installation methods.
- LO3.1 Describe how indoor air quality (IAQ) affects humans.
- LO3.2 Identify sources of building air contaminants and describe how to detect such problems.
- LO3.3 Explain how acceptable IAQ can be achieved.
- LO3.4 Identify IAQ-related HVAC equipment and describe specific activities used to address IAQ problems.
- LO4.1 Explain how to properly shut down and start up boilers.
- LO4.2 Explain how to start up and shut down various chillers and water systems.
- LO4.3 Explain how to start up and shut down air handling and packaged rooftop systems.
- LO5.1 Identify and describe various alternative heating and cooling systems.
- LO5.2 Identify and describe various unique heating and cooling systems and equipment.

## **Course Competencies & Performance Tasks:**

- PT3.1 Perform a building indoor air quality (IAQ) inspection/evaluation.
- PT3.2 Make air measurements using at least one of the following devices: CO<sub>2</sub> detector/sensor, CO detector/ sensor.
- PT3.3 Use a manufacturer's humidifier capacity chart to find the humidifier capacity needed for various building types and sizes.
- PT4.1 Start up and shut down an air handling unit and prepare it for normal operation.
- PT4.2 Start up and shut down at least one of the following: Steam boiler, Hot-water boiler, Reciprocating chiller, Screw chiller, Centrifugal chiller, Cooling tower, Evaporative condenser.
- CC1.1 Pass a comprehensive exam based on Air Quality Equipment learning objectives.
- CC1.2 Pass a comprehensive exam based on *Fiberglass and Fabric Ducts Systems* learning objectives.
- CC1.3 Pass a comprehensive exam based on *Indoor Air Quality* learning objectives.
- CC1.4 Pass a comprehensive exam based on Systems Startup and Shutdown learning objectives.
- CC1.5 Pass a comprehensive exam based on *Alternative and Specialized Heating and Cooling Systems* learning objectives.

# HVAC 180/182 Refrigeration

This module will be divided into three topics:

- 1. Covers the applications, principles, and troubleshooting of retail refrigeration systems. (03304)
- 2. Identifies factors that affect heating and cooling loads. Explains the process by which heating and cooling loads are calculated, and how load calculations are used in the selection of heating and cooling equipment. Covers basic types of duct systems and their selection, sizing, and installation requirements. (03407)
- 3. Expands on the study of product and process refrigeration equipment by describing systems used in cold storage and food processing applications, as well as transportation refrigeration. Various types of defrost systems are covered in detail. (03408)

- LO1.1 Describe retail refrigeration applications and the related refrigeration cycle.
- LO1.2 Identify various types of refrigeration equipment and their application in retail refrigeration.
- LO1.3 Identify and describe components related to the operation of retail refrigeration systems.
- LO1.4 Explain the basic principles of maintaining and troubleshooting various retail refrigeration systems.
- LO2.1 Describe the design process and explain how to evaluate a structure for load estimating.
- LO2.2 Explain how to complete a heating and cooling load estimate.
- LO2.3 Explain how to select equipment based on the load estimate and describe common support systems to be considered.
- LO2.4 Explain how to design air distribution systems.
- LO3.1 Describe methods used to freeze, store, and transport food products.
- LO3.2 Identify and describe various commercial and industrial refrigeration system components.
- LO3.3 Identify and describe various types of defrost systems.
- LO3.4 Describe the main characteristics of ammonia-based refrigeration systems.

- PT1.1 Set up a defrost timer for a freezer.
- PT1.2 Isolate a fault in refrigeration equipment or an ice machine.
- PT1.3 Clean an ice machine.
- PT2.1 Using plans provided by the instructor, perform a load estimate using a standardized method.
- PT2.2 Use manufacturer's product data to select the appropriate heating and cooling equipment based on a load estimate and airflow requirements.
- PT2.3 Determine the number, location, and sizes of supply outlets and return inlets needed in a building.
- PT2.4 Use standard duct sizing tables, duct design calculator, or software application to size the trunk and branch ducts for a selected low-pressure air distribution system.
- PT2.5 Calculate the total system friction loss (external static pressure) for a selected air distribution system.
- PT3.1 Install or make repairs to a packaged refrigeration condensing unit.
- PT3.2 Install or make repairs to a packaged unit cooler in a refrigeration system.
- PT3.3 Identify at least three of the following devices (selection provided by the instructor) commonly used in refrigeration systems: Crankcase pressure regulator, Evaporator pressure regulator, Condenser head pressure regulator, Hot gas bypass regulator, Pressure-controlled cylinder unloader, Solenoid-controlled cylinder unloader.
- CC1.1 Pass a comprehensive exam based on *Retail Refrigeration Systems* learning objectives.
- CC1.2 Pass a comprehensive exam based on *Heating and Cooling System Design* learning objectives.
- CC1.3 Pass a comprehensive exam based on *Commercial/Industrial Refrigeration* learning objectives.

# HVAC 190/192 Codes & Licenses, Energy, Water Treatment, and Building Management

This module will be divided into four topics:

- 1. Explains water problems encountered in heating and cooling systems and identifies water treatment methods and equipment. Covers basic water testing procedures and chemistry. (03308)
- 2. Teaches how to interpret drawings used in commercial construction, including mechanical drawings, specifications, shop drawings, and as-builts. Explains how to perform takeoff procedures for equipment, fittings, ductwork, and other components. (03401)
- 3. Covers heat recovery/reclaim devices, as well as other energy recovery equipment used to reduce energy consumption in HVAC systems. (03404)
- 4. Explains how computers and microprocessors are used to manage zoned HVAC systems. Provides coverage of various network protocols and systems controllers and introduces trainees to the various means of connection and system interface. (03405)

#### **Learning Objectives:**

- LO1.1 Describe problems that the properties of water can cause in HVAC systems.
- LO1.2 Identify types of mechanical water treatment devices and equipment.
- LO1.3 Identify and describe how to address water-related problems that occur in specific types of hydronic and steam systems.
- LO2.1 Describe the types of drawings HVAC technicians work with and how they are used.
- LO2.2 Describe the uses of specifications and submittals in construction projects.
- LO2.3 Describe the takeoff process and how it is performed.
- LO3.1 Identify and describe the operation of various energy recycling and reclamation systems.
- LO3.2 Identify and describe the operation of electric energy-demand reduction and ice storage systems
- LO4.1 Identify and describe the operation of basic digital controllers.
- LO4.2 Describe the architecture of a building management system.
- LO4.3 Describe various user-related tasks that can be achieved through a building management system.
- LO4.4 Describe various building management system control strategies.
- LO4.5 Define the concept of interoperability and describe the various related protocols.

- PT1.1 Use a water analysis test kit to test water.
- PT1.2 Inspect a cooling tower or steam boiler and its related water piping system for signs of water treatment problems.
- PT2.1 Identify and interpret the following on an architectural drawing: Floor plans and details, Elevations, Foundation plan, and Reflected ceiling plan.
- PT2.2 Identify and interpret at least four of the following on a plumbing plan drawing: Sanitary plumbing plans, Domestic water plumbing plans, Riser diagrams, Schedules, Specification references, and Legends.
- PT2.3. Identify and interpret the following on a mechanical plan drawing: Hot- and chilled-water coil piping, HVAC piping, Chiller piping/installation, Refrigeration piping schematics, Air handling unit, installation/connecting ductwork, Hot- and chilled-water flow diagrams, Schedules, Specification references, and Legends.
- PT4.1 Interpret operating data received through building management system software.
- CC1.1 Pass a comprehensive exam based on Water Treatment learning objectives.
- CC1.2 Pass a comprehensive exam based on *Construction Drawings and Specifications* learning objectives.

CC1.3 Pass a comprehensive exam based on Energy Conservation Equipment learning objectives.

CC1.4 Pass a comprehensive exam based on Building Management Systems learning objectives.

# PRP 210/212 HVAC Certification Preparedness

This module will review requirements and material for the EPA Section 608 Certification for Stationary Air Conditioning and Refrigeration for servicing all types of equipment

# **Learning Objectives:**

LO1.1 Identify certification requirements for the EPA Section 608 Certification for Stationary Air Conditioning and Refrigeration.

LO1.2 Be prepared to take a proctored exam for Universal Certification.

# **Course Competencies & Performance Tasks:**

CC1.1 Pass a comprehensive exam based on *EPA Section 608 Certification* learning objectives.

CC1.2 Pass a comprehensive exam based on *Universal Certification* learning objectives.

# CAP 200 HVAC Capstone

The HVAC Capstone provides the students with an overall assessment of their training in HVAC. Students will participate scenarios. Students will explore the various techniques involved in establishing effective communication with the customer, the employer, and co-workers.

# **Course Objectives:**

Mitigate real-world scenarios using knowledge gained throughout the program.

#### **Course Competencies:**

- 1. Successful completion of the HVAC Capstone with correct observance of policies & procedures.
- 2. Demonstrate proficiency in all HVAC courses.

# **Criminal Justice Course Descriptions**

#### LS 101 Introduction to Criminal Justice

This course provides an overview and introduction to criminal justice. Focus on the nature of crime, law and criminal justice, the police and law enforcement, the makeup of the courts, the adjudication system, the issues facing police, corrections.

# **Course Objectives:**

- 1. Define the purpose of law and criminal justice.
- 2. Define the purpose of police and law enforcement.
- 3. Identify various crimes, their nature and category.
- 4. Describe the court and adjudication systems.
- 5. Explain currents issues facing police and corrections.

#### **Course Competencies:**

Pass a comprehensive exam on criminal justice fundamentals.

# LS 110 Criminal Law

This course will cover the study of the power of arrest, relevant federal and California constitutional provisions applicable to a criminal defendant. Students will be introduced to the structures of both the federal and state government including the court systems. Students will be introduced to various types of

crimes, their element, and possible defenses. Relevant pre-trial procedures will be discussed. Theories for punishing criminal law violators will be explored and case briefing and IRAC concepts will be emphasized to students.

# **Course Objectives:**

- 1. Explain the power of arrest, relevant federal and California constitutional provisions applicable to a criminal defendant.
- 2. Identify the structure of federal and state governments with focus on the court systems.
- 3. Explain various defenses and trial procedures for assigned crime types.
- 4. Discuss theories of criminal punishment

## **Course Competencies:**

- 1. Pass a comprehensive exam on criminal law.
- 2. Produce case briefs for assigned criminal cases.

# LS 120 Criminal Procedure and the Constitution

There will be a discussion of the Constitutional aspects of criminal procedure. The student will learn procedural aspects of the criminal system from arrest or summons through pretrial motions, trial, post-conviction, and appellate processes. A study of the Constitution at work in the court system with current applications.

# **Course Objectives:**

- 1. Identify the procedural process from arrest/summons through pretrial motions, trial, post-conviction, and appellate processes.
- 2. Describe Constitutional involvement during this process

#### **Course Competencies:**

Pass a comprehensive exam on criminal procedure.

#### LS 130 Deviance & Violence

This course explores research in the field of behavioral deviance. Students will analyze case studies of various types of psychologic deviances and behaviors, focusing on casual explanations, police investigative strategies, and research-based recommendations for preventing and responding to these violent acts.

#### **Course Objectives:**

- 1. Define behavioral deviance and can explain current research views on the topic.
- 2. Identify police strategies and recommendations for preventing and responding to violent acts discussed in the course.
- 3. Identify methods and strategies for responding to active shooter events.

#### **Course Competencies:**

Pass a comprehensive exam on deviance and violence.

# LS 140 Criminal Evidence

This course focuses on the nature of evidence as it relates to the pretrial and trial process, including: witnesses, hearsay, admissions and confessions, and the exclusionary rule. Emphasis is placed on specific types of evidence: circumstantial, documentary, physical, documentary and recorded.

- 1. Differentiate between the nature of evidence as it relates to pretrial and trial process.
- 2. Identify and define specific types of evidence discussed in the course.

Pass a comprehensive exam on criminal evidence.

# LS 150 Gangs and Narcotics

This course presents an overview of the various classifications and characteristics of drugs and narcotics; as well as a comprehensive, contemporary, and interdisciplinary perspective on criminal sub-cultures in America.

## **Course Objectives:**

- 1. Identify the classifications of various legal and illegal substances.
- 2. Recognize the effects and characteristics of different drug classes.
- 3. Demonstrate knowledge on criminal sub-cultures in America.
- 4. Define large gang presences throughout the U.S.

# **Course Competencies:**

Pass a comprehensive exam on gangs and narcotics.

# LS 160 American Criminal Courts

This course presents an introduction to the structure of the court system (federal, state, and local) in the United States. Topics include descriptions and jurisdictions of each type of court, key court personnel, selection process and working environments, and the judge's unique role. Upon successful completion of this course, students will be able to chart both state and federal court structure and explain the roles of court personnel.

# **Course Objectives:**

- 1. Define the U.S. court structure including the federal, state and local systems.
- 2. Recognize the authority of each type of court.
- 3. Define key aspects involved in the operation of each court type.

#### **Course Competencies:**

Pass a comprehensive exam on America criminal courts.

#### ENG 101 Writing I

This course emphasizes integration of skills and strategies for academic reading and writing, including comprehension, vocabulary, fluency and development, and the conventions of academic texts. Students will be introduced to standard writing formats.

# **Course Objectives:**

- 1. Identify skills and strategies for academic reading and writing.
- 2. Recognize vocabulary discussed in class.
- 3. Recognize various types of writing formats, to include APA and MLA.
- 4. Utilizing point of view, explain the difference between 1st and 3rd person.

#### **Course Competencies:**

- 1. Pass a comprehensive exam on basics of academic writing.
- 2. Produce a written paper on an assigned topic and following APA format.

# LS 201 Communication & Report Writing

Students will learn and apply specialized techniques and approaches to interviews and interrogations as well as legal implications based on a variety of situations. Interviews and interrogation focuses on techniques and philosophies of conducting human communication in a criminal justice or legal environment in which the goal is to obtain accurate information. Obtaining eyewitness information in an investigative environment is also discussed.

# **Course Objectives:**

- 1. Identify and define interview and interrogation techniques and philosophies.
- 2. Recognize legal implications involved in criminal interviews and interrogations.
- 3. Explain the process of preparing a report in chronological order.
- 4. Define the information required to create a complete and accurate report.

#### **Course Competencies:**

- 1. Pass a comprehensive exam on communication and report writing.
- 2. Perform a criminal interview and produce a written report containing accurate information.

# LS 203 Public Safety Hiring Process

This course provides an overview of employment in the criminal justice field. Topics include nature of the work, social media impacts, employment opportunities, median income, training, opportunity for advancement, employment outlook for ten different general classifications.

# **Course Objectives:**

- 1. Identify various employment opportunities in the criminal justice field.
- 2. Identify necessary certificates required for various types of employment.
- 3. Recognize employment outlooks for ten general employment classifications.

# **Course Competencies:**

- 1. Pass a comprehensive exam on public safety hiring process.
- 2. Prepare applications for various employment opportunities in the criminal justice field.

# CS 108 Career Development

Instruction on interviewing techniques and on-the-job career development; i.e., negotiating salary and job performance reviews. Instruction in resume development. Exercises will include creating a personal resume for the student to use in his/her job search.

# **Course Objectives:**

- 1. Demonstrate effective interviewing techniques.
- 2. Create a professional resume.

# **Course Competencies:**

- 1. Complete a mock interview with Career Counselor.
- 2. Develop a professional resume with Career Counselor and submit to three job postings.

# PHYS 101 Physical Fitness for Public Safety

Emphasizes total body fitness and focuses on aerobic activity and resistance training. Lecture and lab activities focus on cardiorespiratory endurance, muscular strength and endurance, safe activity principles, nutrition, and risk factors for disease.

## **Course Objectives:**

- 1. Define basic forms of aerobic activity and resistance training.
- 2. Identify various types of endurance training.
- 3. Understand safe activity principles, nutrition, and risk factors for disease

#### **Course Competencies:**

- 1. Pass a comprehensive exam on physical fitness.
- 2. Demonstrate muscular strength and cardiorespiratory endurance during a physical assessment test.

#### **HLS 101** Introduction to Homeland Security & Terrorism

The course will cover the role of the Department of Homeland Security (DHS), review the National Strategies for Homeland Security. Also, defined, reviewed, and discussed are terrorism, international terrorism, and the threats related with weapons of mass destruction. The course will review emergency preparedness and response to effectively attempt to mitigate the threats associated with an attack on the homeland.

# **Course Objectives:**

- 1. Define the purpose of the Department of Homeland Security.
- 2. Define various types of terrorism and discuss threats presented by weapons of mass destruction.
- 3. Identify emergency response procedures associated with homeland attack threats.

# **Course Competencies:**

Pass a comprehensive exam on homeland security and terrorism.

# HLS 102 National Security Law

The legal framework for the use of force abroad; incorporated international law as national security law; intelligence collection and covert operations; citizen access to national security information; government controls on national security information.

This course is available in the Homeland Security emphasis.

#### **Course Objectives:**

- 1. Explain the use of force in situations discussed in class.
- 2. Identify methods of intelligence collection and laws of enforcement nationally and abroad.
- 3. Explain government controls and citizen access to national security information.

## **Course Competencies:**

Pass a comprehensive exam on homeland security and terrorism.

# **HLS 201** Homeland Security Intelligence

This course examines the still-developing field of homeland security intelligence and examines what it is, what roles are played by homeland security, national and state/local intelligence, and the types of analytic skills that homeland security analysis requires.

This course is available in the Homeland Security emphasis.

# **Course Objectives:**

- 1. Identify the role of Homeland Security Intelligence.
- 2. Describe the types of analysis performed by Homeland Security Intelligence.

#### **Course Competencies:**

Pass a comprehensive exam on Homeland Security Intelligence.

# HLS 202 Confronting Terrorism & Intelligence Management

This course of study will focus on obtaining, managing, and analyzing intelligence information. Topics include intelligence collection and analysis methods; team management preparation and planning; covert and clandestine operations; vetting assets and informants; threat assessment analysis; surveillance and counter surveillance; and counterintelligence.

This course is available in the Homeland Security emphasis.

#### **Course Objectives:**

1. Define intelligence information and methods to obtain, manage and analyze it.

2. Identify management of team preparation and operation planning.

# **Course Competencies:**

Pass a comprehensive exam on confronting terrorism & intelligence management.

# **HLS 300** Religious Extremism and Terrorism

This course examines the complex history and contemporary relations between religion, violence, extremism, and terrorism. This course includes the religious context and theories for the religious extremism and the understanding of the extremist groups and individuals from these religious groups and their motivated acts of violence against religion.

This course is available in the Homeland Security and/or the Corporate Security and Public Safety emphasis.

# **Course Objectives:**

- 1. Differentiate between various religious extremist groups and their motivation for violence.
- 2. Describe the progression of religious extremism and terrorism and the role this plays in modern society.

#### **Course Competencies:**

Pass a comprehensive exam on religious extremism and terrorism.

# **CPS 300** Private Sector Securities

In this course students will examine the interrelationships of the criminal justice system to the business corporate security. It also provides an overview into Homeland Security and the physical aspects of the private security field.

This course is available in the Homeland Security and/or the Corporate Security and Public Safety emphasis.

# **Course Objectives:**

- 1. Describe the correlation between criminal justice and business corporate security.
- 2. Identify the physical aspects of the private security field.

#### **Course Competencies:**

Pass a comprehensive exam on private securities.

# CO 101 Introduction to Corrections

This course will examine an overview of the history of corrections in America with a review of the correctional process including: probation, restorative justice, the death penalty, and imprisonment. The organization, management and operation of correctional facilities, inmate life and environment will be examined, including the legal foundation of prisoners' rights.

# **Course Objectives:**

- 1. Define the purpose of corrections in the United States.
- 2. Describe the corrections process, to include: probation, restorative justice, the death penalty, and imprisonment.
- 3. Identify the management and operation of correctional facilities and the inmate environment.

# **Course Competencies:**

Pass a comprehensive exam on corrections fundamentals.

## CO 102 Juvenile Justice Delinquency

This course provides an overview of the juvenile justice system in the United States. It focuses on the design and application of the juvenile justice system. Upon completion of the course, students will have a full understanding of the interrelationships among philosophy, notions of causation, and procedural

requirements provided to youthful offenders and abused children. Students will also be able to discuss and identify diversion and prevention programs, the effects of incarceration, and possible alternatives to incarceration. Last, the future of juvenile courts and the juvenile justice system will be addressed. This course is available in the Corrections emphasis.

# **Course Objectives:**

- 1. Explain the design and application of juvenile justice system in the United States.
- 2. Understand interrelationships among philosophy, notions of causation, and procedural requirements provided to youthful offenders and abused children.
- 3. Identify prevention programs and alternatives to juvenile incarceration.
- 4. Identify the effects of incarceration on juvenile criminals.
- 5. Knowledge of juvenile court systems and their future.

#### **Course Competencies:**

Pass a comprehensive exam on juvenile justice delinquency.

## CO 201 Inmate Supervision

This course examines inmate subcultures and violence in prisons. Analyzes prison environment for correctional officers. Explores life behind bars/offender difficulties in reentering society. This course is available in the Corrections emphasis.

#### **Course Objectives:**

- 1. Identify causes of violence and subcultures that exist in prisons.
- 2. Describe difficulties offenders will face exiting the prison system.
- 3. Identify risk, hazards and work environment for correctional officers.

# **Course Competencies:**

Pass a comprehensive exam on inmate supervision.

# CO 202 Probation and Parole

This course introduces probation, the most common response to criminal offenders, and parole. As the problem of prison overcrowding continues, probation and parole will expand, and so will the controversy surrounding their use. Students gain an understanding not only of probation and parole history, administration, policy, and procedures, but also areas of controversy. The course also provides insight into the difficult but interesting work performed by probation and parole officers.

# This course is available in the Corrections emphasis.

# **Course Objectives:**

- 1. Define probation and parole as they relate to criminal justice.
- 2. Identify the administrative policy and procedures involved with probation and parole.
- 3. Identify controversy in the prison system and the role that probation and parole play.
- 4. Recognize the work performed by probation and parole officers.

# **Course Competencies:**

Pass a comprehensive exam on probation and parole.

# CO 203 Sex Offenders

This course explores issues related to deviant sexual behavior in contemporary society. Topics include sexual offenders, child molesters, pornography, Megan's Law, sexual assault, incest, prostitution, and sex offender legislation.

This course is available in the Corrections and/or Criminal Investigations emphasis.

#### **Course Objectives:**

1. Define deviant sexual behavior as it relates to contemporary society.

2. Identify and define laws/crimes associated with sex offenders.

# **Course Competencies:**

Pass a comprehensive exam on sex offenders.

# CI 203 Domestic Violence

This course presents the patterns and characteristics of victims in the criminal justice system. Topics include the cause, consequences, and prevalence of domestic violence, and the different approaches law enforcement has taken to respond to victims' issues.

This course is available in the Corrections and/or Criminal Investigations emphasis.

# **Course Objectives:**

- 1. Define domestic violence and the classification of these crimes.
- 2. Identify and define the cause, consequences, and prevalence of domestic violence.
- 3. Recognize various approaches to domestic violence responses.

# **Course Competencies:**

Pass a comprehensive exam on domestic violence.

# CI 101 Principles of Investigation

This course addresses the techniques, procedures, and ethical issues in the investigation of crime, including organization of the investigative process, crime scene searches, interviewing and interrogating, surveillance, source of information, utility of evidence, scientific analysis of evidence and the role of the investigator in the trial process.

# **Course Objectives:**

- 1. Define the purpose of criminal investigations.
- 2. Define the process and organization of criminal investigations.
- 3. Determine methods of interrogation, surveillance and information gathering.
- 4. Identify the role of the investigator in the trial process.

## **Course Competencies:**

Pass a comprehensive exam on principles of investigation.

#### CI 102 Search and Seizure

This course is designed to teach new Federal and State Search and Seizure changes and recent requirements which affect current law enforcement procedures.

This course is available in the Criminal Investigations emphasis.

# **Course Objectives:**

1. Explain the powers and restrictions of search as it relates to federal and state requirements.

#### **Course Competencies:**

Pass a comprehensive exam on search and seizure.

# CI 201 Crime Scene Documentation

This course will provide the students with an understanding of the procedures of crime scene observation, note taking, photography and report writing.

This course is available in the Criminal Investigations emphasis.

# **Course Objectives:**

1. Identify the procedures involved in crime scene observation and report writing.

2. Recognize proper techniques for crime scene photography.

# **Course Competencies:**

Pass a comprehensive exam on crime scene documentation.

# CI 202 Crime Scene Processing

This course is designed to introduce the investigative concepts involved in the "Crime Scene Dynamics" of processing the aftermath of a criminal incident. The students will be exposed to how to respond to crime scenes, and examine the multitude of responsibilities involved, such as: the evidence must be identified, photographed, and preserved, witnesses must be isolated and interviewed, the scene must be isolated and protected, fingerprints must be developed, and suspects must be identified and located.

This course is available in the Criminal Investigations emphasis.

#### **Course Objectives:**

- 1. Identify various types of crime scene evidence and proper chain of custody procedures involved in evidence collection.
- 2. Define responsivities in isolating and protecting the crime scene, evidence, and witnesses.
- 3. Determine methods to identify and locate suspects from the crime scene.

#### **Course Competencies:**

Pass a comprehensive exam on crime scene processing.

# **CPS 101** Introduction to Corporate Security

This course will cover the history of the private security industry including the development, role, responsibility, limitations, and liabilities within corporate America.

#### **Course Objectives:**

- 1. Describe the history and development of private security.
- 2. Explain the purpose and limitations of private security in the corporate environment.

#### **Course Competencies:**

Pass a comprehensive exam on corporate security fundamentals.

# CPS 102 Criminal Investigations & Loss Prevention

This course will examine basic investigative techniques, taking witness statements, interviews, and reports. An overview of police procedures is also included. Students will learn the basic principles and methodologies involved with the prevention of shrinkage or loss. Students will be introduced to basic theories and concepts, key terms and definitions and current critical issues.

This course is available in the Corporate Security and Public Safety emphasis.

## **Course Objectives:**

- 1. Describe techniques for investigations, witness statements, interviews, and reports.
- 2. Identify standard police procedures
- 3. Identify methods and principles to prevent loss.

#### **Course Competencies:**

Pass a comprehensive exam on criminal investigations and loss prevention.

# **CPS 201** Resolving Conflict

This course identifies issues and conflicts associated with the private security industry by examining security management, recruitment, selection, training, investigation of crimes, terrorism, and natural disasters.

This course is available in the Corporate Security and Public Safety emphasis.

# **Course Objectives:**

- 1. Identify current issues that relate to private security in topics discussed in class.
- 2. Describe methods of training and management to mitigate private security issues.

# **Course Competencies:**

Pass a comprehensive exam on resolving conflict.

#### CPS 202 Risk & Threat Management

This course provides the student with an understanding of assessing potential risks which may originate from members or employees within an organization by identifying specific risk indicators. An emphasis is given to the process of risk analysis along with the ability to design, manage, and implement a response to potential threats.

This course is available in the Corporate Security and Public Safety emphasis.

## **Course Objectives:**

- 1. Describe methods to assess potential risks and identify risk indicators within an organization.
- 2. Identify strategies and recommendations to moderate risk analysis and potential threats.

## **Course Competencies:**

Pass a comprehensive exam on risk and threat management.

# **STP 200** Strategic Operations Capstone

Strategic Operations Capstone provides training services and products for the military, law enforcement, and other organizations. Students will participate in a STOPS scenario.

# **Course Objectives:**

Mitigate real-world scenarios using knowledge gained throughout the program.

## **Course Competencies:**

- 1. Completion of a strategic operations scenario with correct observance of policies & procedures.
- 2. Demonstrate proficiency in courses.

# **Allied Health Course Descriptions**

# AP 114 Anatomy and Physiology I

This course provides an overview of the human body. It introduces students to the structure, function, and diseases of the human body. It also introduces students to related terminology used in the clinical settings to describe body positions and parts. Students will be introduced to human cellular development and the impact of disease processes of each specific body system.

- 1. Describe structural organization of the human body.
- 2. Describe the layers of skin and the characteristics of each layer.
- 3. Describe the skeletal structures and one location of each structure.
- 4. Identify the major skeletal muscles of the body, giving the action of each and the structure of each.
- 5. Describe the structures of the heart and the function of each and explain the cardiac cycle, including the cardiac conduction system.
- Describe the components of blood, giving the function of each component listed. How to stop bleeding. Describe the causes, signs and symptoms, and treatments of various diseases and disorders of the blood.

7. Describe the pathways and organs of the lymphatic system. Explain how antibodies fight infection. Describe the causes, signs and symptoms, and treatments of major immune disorders.

# **Course Competencies:**

Pass a comprehensive exam on Anatomy and Physiology.

# AP 115 Anatomy and Physiology II

This course provides an overview of the human body. It introduces students to the structure, function, and diseases of the human body. It also introduces students to related terminology used in the clinical settings to describe body positions and parts. Students will be introduced to human cellular development and the impact of disease processes of each specific body system.

# **Course Objectives:**

- 1. Describe the structure and function of each organ in the respiratory system. Explain how oxygen and carbon dioxide are transported in the blood.
- 2. Describe the general functions of the nervous system. Describe the structures and functions of the central nervous system.
- 3. Describe the structure, location, and functions of the kidney. Describe the causes, signs and symptoms, and treatments of various diseases and disorders of the urinary system.
- 4. Summarize the organs of the male reproductive system including the locations, structures, and functions of each. Summarize the organs of the female reproductive system including the locations, structures, and functions of each. Describe the causes, signs and symptoms, and treatments of the most common sexually transmitted infections.
- 5. Describe the organs of the alimentary canal and their functions. Explain the functions of the digestive system's accessory organs.
- 6. Identify the hormones released by the pituitary gland, thyroid gland, parathyroid glands, adrenal glands, pancreas, and other hormone-producing organs, and give the functions of each.
- 7. Describe the anatomy of the nose, ear, eyes, tongue, and the function of each part.

#### **Course Competencies:**

Pass a comprehensive exam on Anatomy and Physiology.

# MT 110 Medical Terminology

This course introduces the student to medical terminology as it relates to the anatomical structure of the human body. Emphasis is on body system root words, prefixes, suffixes, and introductory terminology. Medical language and accepted medical abbreviations are discussed in detail.

# **Course Objectives:**

- 1. Explain how medical terms are formed.
- 2. Describe the proper procedure for pluralizing.
- 3. Describe the four-word parts used to build medical terms.
- 4. Define common medical combining forms.
- 5. Define commonly accepted medical term abbreviations.
- 6. Define commonly accepted medical term symbols.
- 7. Describe the use of medical abbreviations as it relates to medico-legal procedures.

# **Course Competencies:**

Pass a comprehensive exam on medical terminology.

# PH 101 Introduction to Pharmacology

This course introduces students to pharmacology as it relates to a medical office setting. Students gain knowledge of Federal and State drug laws, general drug classifications, drug indications and

contraindications, and inventory requirements. Nutrition and its effect on a patient's health will also be emphasized.

# **Course Objectives:**

- 1. Identify the different classifications of medications.
- 2. Describe the chemical, generic, and trade names of medications
- 3. Identify the main manufacturing sources of drugs
- 4. Identify the main sources of drug information.
- 5. Discuss the different schedules of controlled substances
- 6. Discuss desired effects, side effects, and adverse reactions
- 7. Discuss governmental legislation and oversight of medication administration.
- 8. Identify the role of nutrients in the health of the body
- 9. Discuss how the body uses food.

## **Course Competencies:**

Pass a comprehensive exam on pharmacology.

# MO 110 Medical Office Administration

This course revolves around various medical office management systems and provides students with knowledge in the proper procedures for recording and maintaining patient charts; proper charting techniques; filing and management systems. Mail management stresses both manual and electronic mail communications. Delivering services and specific handling of billing materials will be emphasized. Students will be introduced to dictation and transcription service, proper techniques for handling general office correspondence, letter writing, and composing routine correspondence.

# **Course Objectives:**

- 1. Identify the types of correspondence used in a medical environment.
- 2. Describe the parts of a business letter.
- 3. Explain the process for handling mail.
- 4. Explain how to create a new medical chart.
- 5. Describe the various types of medical chart filing.
- 6. Describe the procedures for properly transcribing a chart.
- 7. Describe the purpose of dictation.

# **Course Competencies:**

Pass a comprehensive exam on medical office systems.

# **COD 101** Introduction to Medical Insurance & Coding

This course provides instruction on how to correctly code diagnostic and professional services rendered by the physician, necessary in billing for reimbursement by insurance companies. Emphasis is on the International Classification of Diseases (ICD-10-CM). Current Procedural Terminology (CPT) and the HCPCS for Medicare claims, as well as electronic coding procedures. The course also includes procedures for the hard copy and electronic completing of the Universal HCFA-1500 insurance form for selected private insurance, HMO, PO, and Medicare.

- 1. Describe various types of insurance programs.
- 2. Explain the procedures and processes involved in submitting health insurance claims.
- 3. Execute the basic steps of the HCFA-1500
- 4. Explain the rules relating to coordination of benefits
- 5. Describe the purpose and use of the ICD-10 manual.
- 6. Describe the purpose and use of the CPT manual.

7. Describe the purpose and use of the HCPSC manual.

# **Course Competencies:**

Pass a comprehensive exam on medical insurance and coding.

# MO 120 Medical Principles & Foundations

This course provides instruction on the principles and foundations of the medical profession. Instruction includes history of the medical profession, types of medical practices, ethical and medico-legal issues, HIPAA regulations. This course also emphasizes the importance of therapeutic communications that exists between the medical professional and the patient.

# **Course Objectives:**

- 1. Explain the responsibilities of the medical assistant
- 2. Explain the personal characteristics of a successful medical professional.
- 3. Describe the multiple disciplines associated with the medical profession
- 4. Explain the different ethical and legal responsibilities of the medical professional.
- 5. Explain the role of HIPAA as it applies to the medical office environment.

## **Course Competencies:**

Pass a comprehensive exam on medical principles and foundations.

# PC 101 Patient Communication

This course provides students with an understanding of the proper procedures related to front office responsibilities. Emphasis is on responsibilities related to scheduling appointments and receptionist duties. Students will be instructed in the use of newest medical office communication systems and proper telephone etiquette. Other communication topics will include medical assistant's responsibilities relating to the proper education and preventive techniques of patients.

# **Course Objectives:**

- 1. Demonstrate proper telephone etiquette
- 2. Describe proper procedures for taking telephone messages
- 3. Describe proper procedures for routing telephone calls
- 4. Explain the purpose of proper telephone triage
- 5. Describe the importance of proper appointment scheduling
- 6. Identify the elements important in a patient reception room
- 7. Identify the benefits of patient education
- 8. Describe techniques for educating patients with special needs.
- 9. Describe information that should be included in educational information packets.

# **Course Competencies:**

Pass a comprehensive exam on patient communications.

# KB 101 Keyboarding

This course is designed to provide the student with basic computer keyboarding techniques. Emphasis is on the mastery of the keyboard, which increases speed and maintains accuracy.

# **Course Objectives:**

Familiarization with the computer keyboard.

#### **Course Competencies:**

- 1. Maintain a 30 word per minute speed, OR
- 2. If proficiency demonstrated, increase speed by 10%

#### MO 140 Introduction to Medical Bookkeeping & HIT

This course explains the improvements to health care that are based on health information technology (HIT). Covers key government initiatives, defines the clinical encounter and the billing cycle, and discusses the benefits of integrated practice management and electronic health record programs. Additionally, this course explains the roles of professional health care and administrative staff in implementing HIT in physician practices. Describes how to interpret a remittance advice (RA) from a health plan and to enter and apply insurance payments in a PM/EHR. The process of appealing claims and post payment audits are discussed. Students also learn how to create patient statements and process a check returned for nonsufficient funds.

## **Course Objectives:**

- 1. List the six steps for checking a remittance advice.
- 2. Describe the procedures for entering insurance payments.
- 3. Explain how to apply insurance payments to charges.
- 4. Explain how to enter capitation payments.
- 5. Discuss the purpose of appeals and post payment audits.
- 6. Compare standard patient statements and remainder patient statements.
- 7. Explain the difference between once-a-month and cycle billing.
- 8. Explain the procedure for processing a nonsufficient funds payment
- 9. Compare practice management (PM) programs and electronic health records (EHRs).
- 10. Discuss the government health information technology (HIT) initiatives that have led to integrated PM/EHR programs.
- 11. List the eight facts that are documented in the medical record for an ambulatory patient encounter.
- 12. Identify the additional uses of clinical information gathered in patient encounters.
- 13. Compare electronic medical records, electronic health records, and personal health records.
- 14. Describe the four functions of a practice management program that relate to managing claims.
- 15. List the steps in the medical documentation and billing cycle.
- 16. Compare the roles and responsibilities of clinical and administrative personnel on the physician practice health care team.
- 17. Explain how professional certification and lifelong learning contribute to career advancement in medical administration.

#### **Course Competencies:**

Pass a comprehensive exam on bookkeeping and HIT.

## MO 130 Collections & Reimbursement Procedures

This course provides an overview of the accounts receivable follow-up process, including the use of aging reports. The correct procedures for collections, including payment plans and the write-offs of uncollectible balances, are described. Explains the content of shared reports and how they are used to help generate and monitor practice revenue as well as to improve the delivery of health care, including the use of reports in PM/EHR to demonstrate meaningful use. Provides an overview of the content and format of electronic and paper claims, and then illustrates the flow of claims from the PM/EHR to a clearinghouse and on to the payer. Students gain the skills required to create, submit, and monitor insurance claims through the claim adjudication process. Students also learn how to create patient statements and process a check returned for nonsufficient funds.

- Explain why it is important to collect overdue balances from patients.
- 2. Describe the way in which financial policies help establish payment expectations.
- 3. Describe the procedures followed to identify overdue accounts.
- 4. Identify the major federal laws that govern the collection process.

- 5. Explain how letters are used in collecting overdue payments.
- 6. Explain payment plans.
- 7. Discuss the use of collection agencies to pursue patients who have not paid overdue bills.
- 8. Describe the procedures for clearing uncollectible balances and small balances from patients' accounts receivable.
- 9. Briefly compare the CMS-1500 paper claim and the 837 electronic claims.
- 10. Discuss the information contained in the Claim Management dialog box.
- 11. Explain the process of creating claims.
- 12. Describe how to locate a specific claim.
- 13. Discuss the purpose of reviewing and editing claims.
- 14. Analyze the methods used to submit electronic claims.
- 15. List the steps required to submit electronic claims.
- 16. Describe how to add attachments to electronic claims.

Pass a comprehensive exam on Collection and Reimbursement Procedures.

# EHR 110 Electronic Health Records I

Students will gain the knowledge and skills needed to use a PM/EHR to create appointments, as well as to add provider breaks, create recall lists, and print providers' schedules. This course covers the skills needed to use a PM/EHR to check patient balances and create chart numbers and cases. Describes methods used to enter documentation in an EHR, including the use of dictation and transcription, voice recognition software, and templates. Students practice entering progress notes with and without the use of a template. The e-prescribing and electronic order entry features of an EHR are also presented. Introduction to the basics of coding, including ICD-9-CM and ICD-10-CM, CPT, and E/M, and explains both paper and electronic encounter forms. The student learns how to use an EHR to record a patient's history, allergies, medications, vital signs, and chief complaint. Students also practice sending and receiving intra-office messages and creating patient reminder letters.

## **Course Objectives:**

- 1. Identify the four stages of patient flow.
- 2. Discuss the main sections of the patient chart.
- 3. Describe the procedures for recording a patient's past medical, family, and social history.
- 4. Explain how allergies and intolerances are entered in the patient chart.
- 5. Describe the procedure used to enter patient medications.
- 6. Explain how the chief complaint is recorded in a progress note.
- 7. Explain how a patient's vital signs are recorded in the patient chart.
- 8. Explain the uses of an intra-office messaging system in an EHR.
- 9. Describe how letters are created in an EHR.
- 10. Discuss the methods of entering documentation in an EHR.
- 11. Compare the process of entering a progress note with and without using a template.
- 12. Explain why ordering and receiving test results electronically is more efficient than paper methods.
- 13. List the steps required to enter an electronic order.
- 14. Explain how orders are processed in an EHR.
- 15. Define medical coding.

# **Course Competencies:**

Pass a comprehensive exam on electronic health records.

# COD 110 ICD-10-CM Coding

Introduction to the basics of coding, including ICD-10-CM and ICD-10-CM, CPT, and E/M, and explains both paper and electronic encounter forms. Discussion of coding and billing compliance, with a focus on strategies to avoid common coding and billing problems. Students then review and post charges that have been electronically transmitted and record time-of-service payments. Students practice entering progress notes with and without the use of a template. The e-prescribing and electronic order entry features of an EHR are also presented.

## **Course Objectives:**

- 1. Define medical coding.
- 2. List the six steps in the charge capture process.
- 3. Explain the purpose of auditing diagnosis and procedure code assignment.
- 4. Discuss the effect of health plans' rules on billing.
- 5. Describe the use of CPT/HCPCS modifiers to communicate billing information to health plans.
- 6. Discuss strategies to avoid common coding/billing errors.
- 7. Explain the difference between posting charges from a paper encounter form and posting charges from an electronic encounter form.

# **Course Competencies:**

Pass a comprehensive exam on basic coding.

# EHR 120 Electronic Health Records II

This course introduces principles of quality assessment and improvement, and utilization, risk, and case management, in healthcare. Topics include Continuous Quality Improvement, and case management processes, data analysis/reporting techniques, credentialing, regulatory quality monitoring requirements, and outcome measures and monitoring. Upon completion, students should be able to abstract, analyze, and report clinical data for facility-wide quality management/performance improvement programs and monitor compliance measures. This course provides a comprehensive discussion of topics common to the health information profession. Emphasis is placed on application of professional competencies, job search tools, and preparation for the certification examination. Upon completion, students should be able to demonstrate competence in entry-level domains and subdomains for health information technologies.

# **Course Objectives:**

- 1. Describe key privacy and security issues related to EHRs.
- 2. Set up new insurance companies and edit existing insurance company information.
- 3. Add patients to the Office Schedule; use the Patient Tracker; create a patient Face Sheet, an Office Visit note and reports, various office visit reports; and conduct a chart evaluation.
- 4. Order and process lab tests, and create a test report.
- 5. Create, edit, and document procedures and diagnoses.
- 6. Perform a search of the medical database.
- 7. Describe the elements of a data security program.
- 8. Describe the four primary components of the security provisions of the Health Insurance Portability and Accountability Act.
- 9. Discuss the roles and responsibilities of health information technicians regarding data security.

#### **Course Competencies:**

Pass a comprehensive exam on advanced EHR concepts.

#### COD 120 Medical Coding II

40 Hours Lecture 10 Lab 30

In-depth coverage of ICD-10 coding rubrics, conventions, principles, and updates as they apply to accurate coding of complex cases. Principles of inpatient and outpatient coding are covered in this class. Examine E&M guidelines and HCPCS coding.

## **Course Objectives:**

- 1. Apply ethical principles and methodologies of medical coding.
- 2. Differentiate between the various coding methods applied in healthcare settings such as hospitals, physician's offices, and insurance companies.
- 3. Apply basic to intermediate principles of CPT, E&M guidelines and HCPCS coding.
- 4. Demonstrate an ability to assign ICD-10 codes.
- 5. Analyze patient records and assign codes for advanced procedures.
- 6. Demonstrate proper sequencing of codes per established guidelines and standards.
- 7. Utilize intermediate and advanced coding methods to solve complex case studies.

#### **Course Competencies:**

Pass a comprehensive exam on advanced coding procedures with ICD-10.

# CS 103 Career Development

This course offers an introduction to successful interviewing and resume development techniques. In addition, it provides information on effective networking and seeking out the appropriate job. Instruction is provided on correct workplace habits, professionalism, and maintaining a positive attitude.

#### **Course Objectives:**

- 1. Demonstrate effective interviewing techniques.
- 2. Create a professional resume.

#### **Course Competencies:**

- 1. Complete a mock interview with a Career Advisor.
- 2. Develop a professional resume with a Career Advisor and submit to three job postings.

# **EX 111** Externship for HIT

Students will extern 160 hours in a medical setting under the direct supervision of the facility administrator and general supervision of the School's program director. Students will receive hands-on application of their recently acquired medical skills and will develop the confidence to secure a career position.

# **Course Objectives:**

Satisfactorily complete externship.

#### **Course Competencies:**

Demonstrate introductory proficiency in the medical assisting profession.

## **NPC 115** NCCT Preparation Course (NCMOA)

This course is designed for graduates of the Healthcare Information Technician diploma program and the healthcare information technicians whom are taking the Associate in Applied Science degree program. The test preparation course is aligned to the NCCT exam requirements and reviews all core healthcare information technician responsibilities which include medical administrative and front office tasks. The course will consist of medical terminology, medical front office skills, EHR/EMR for the medical office.

#### **Course Objectives:**

Upon completion of the course, students will be prepared for the NCMOA exam (National Certified Medical Office Assistant) certification test through the NCCT (National Center for Competency Testing).

# **Course Competencies:**

Pass a comprehensive certification exam for national certification as a Medical Office Assistant through NCCT (National Center for Competency Testing).

# **NPC 116** NCCT Preparation Course (NCICS)

This course is designed to provide health information technicians with advanced knowledge in insurance and medical billing/coding services in physician's offices and medical specialty practices for health care providers to be paid for services rendered. Healthcare information technicians prepare and submit claims to insurance companies, prepare and send statements to patients. Healthcare information technologist must be knowledgeable and possess skills in the areas of medical terminology, anatomy & physiology, advanced diagnostic and procedural coding, insurance claims processing, and medical billing procedures.

#### **Course Objectives:**

Upon completion of the course, students will be prepared for the NCICS exam (National Certified Insurance and Coding Specialist) certification test through the NCCT (National Center for Competency Testing).

#### **Course Competencies:**

Pass a comprehensive certification exam for national certification as an Insurance Coding Specialist through NCCT (National Center for Competency Testing).

# LP 110 Laboratory Procedures I

This course provides students with an introduction to the fundamentals of microbiology and use of the microscope. Laboratory procedures including urinalysis and other specimen collection techniques will be emphasized. Point of Care Test (POCT) for glucose and hematocrit analysis, as well as home pregnancy testing, will be covered. Emphasis will be placed on infection control protocols and quality assurance standards.

#### **Course Objectives:**

- 1. Describe how microorganisms cause disease.
- 2. Demonstrate procedures for collecting and handling various specimens.
- 3. Discuss the regulatory requirements of CLIA.
- 4. Describe the purpose of the medical office laboratory.
- 5. Describe the goal of quality assurance.
- 6. Demonstrate the proper procedure for performing a urinalysis.
- 7. Demonstrate the proper procedure for performing a glucose test.

# **Course Competencies:**

- 1. Pass a comprehensive exam on laboratory procedures.
- 2. Pass a laboratory proficiency procedure relating to urinalysis testing.
- 3. Pass a laboratory proficiency procedure relating to glucose testing.

# LP 120 Laboratory Procedures II

This course provides an introduction to the proper technique and procedures for performing phlebotomy. It includes needle technique, creating patient rapport, medical safety, and processes of keeping records. Instruction includes introduction to needle sizes, vacuum tubes, wing-infused phlebotomy. Emphasis is placed on safety and proper handling and disposing of bio-hazardous wastes and sharps.

- 1. Describe the composition and function of blood.
- 2. Identify the equipment and supplies necessary for drawing blood.
- 3. Describe common fears and concerns of patients.

- 4. Identify common blood tests and their purposes.
- 5. Demonstrate proper procedure for collecting a blood specimen
- 6. Demonstrate proper procedure for handling and disposing of containment equipment.

- 1. Pass a comprehensive exam on phlebotomy procedures.
- 2. Demonstrate basic laboratory procedure on venipuncture and proper us of centrifuge.

#### **CP 110** Clinical Procedures I

This course provides instruction on medication administration, drug measurement and review of various routes for administration of medications. Students gain comprehensive hands-on experience performing the following forms of injections; intramuscular, subcutaneous, and intradermal.

# **Course Objectives:**

- 1. Identify MA's responsibilities for drug administration
- 2. Demonstrate dosage calculations
- 3. Identify the Right of Administration
- 4. Differentiate different types of needles and syringes
- 5. Describe various techniques for administering drugs
- 6. Demonstrate parenteral drug administration
- 7. Demonstrate proper charting procedures of drug administration

#### **Course Competencies:**

- 1. Pass a comprehensive exam on clinical I procedures.
- 2. Pass a laboratory proficiency procedure relating to drug administration.

# **CP 120** Clinical Procedures II

This course provides instruction in patient preparation, charting of treatments, measurements of height and weight, and patient examination — vital sign recording will be emphasized. Students receive an orientation to patient services, which is requisite knowledge for not only the clinical health care provider, but for the administrative aspect of the health care profession. Instruction will encompass patient data collection, medical health history, and physical examinations. Students will learn to monitor vital signs for potential medical emergencies. This course also provides an introduction to electrocardiographs (ECG), characteristics of normal electrocardiogram rhythms and ECG procedures.

#### **Course Objectives:**

- 1. Identify the skills necessary to conduct a patient interview.
- 2. Identify the six "C's" of writing a patient history
- 3. Describe the procedure for conducting a patient interview
- 4. Describe vital signs and common body measurements
- 5. Demonstrate the taking of vital signs
- 6. Identify the instruments necessary to perform vital sign measuring
- 7. Define the purpose of a general physical examination
- 8. Explain conduction system of the heart.
- 9. Describe normal sinus rhythms of the heart and artifacts that cause error.

#### **Course Competencies:**

- 1. Pass a comprehensive exam on clinical II procedures.
- 2. Pass a laboratory proficiency procedure on taking vital signs.
- 3. Pass a comprehensive exam on electrocardiograms.
- 4. Demonstrate the proper procedure for conducting an ECG.

# CP 130 Clinical Procedures III

This course provides instruction in the procedures and protocol for the following specialty medical examinations; obstetrics, gynecology, male reproductive, pediatrics, urology, allergology, dermatology, endocrinology, ophthalmology, orthopedics, otorhinolaryngology, proctology. In addition, medical emergency procedures and in-office patient care for burns, strains, sprains, bruise, etc. will be included. Emphasis will be placed on the use of ambulation devices.

#### **Course Objectives:**

- 1. Describe the MA responsibility during different specialty examinations
- 2. Identify the types of diagnostic tests performed during specialty examinations
- 3. Identify common signs of domestic violence, elder and child abuse.
- 4. Discuss protocol associated with assisting during gynecological examination.
- 5. Describe the treatment for assisting with strains, sprains and other tissue injuries
- 6. Discuss the procedures associated with RICE
- 7. Describe the proper procedure for educating a patient on the use crutches.

#### **Course Competencies:**

- 1. Pass a comprehensive exam on clinical III procedures.
- 2. Pass a laboratory proficiency procedure on assisting with ambulation devices.

#### CP 140 Clinical Procedures IV

This course provides instruction in the principles of medical asepsis and proper procedures for managing infectious control. Instruction includes concepts of universal precautions, HIV, hepatitis, and other blood-borne pathogen protection. Proper asepsis and cleaning of patient exam and treatment areas will also be discussed. Emphasis will be placed on the use and care of personal protective equipment.

# **Course Objectives:**

- 1. Explain the disease process.
- 2. Define infectious disease prevention.
- 3. Explain the body's defense mechanisms that provide protection against infection.
- 4. Describe the MA's role in infectious control.
- 5. Demonstrate the proper procedure in preparing instruments for sterilization.
- 6. Demonstrate the use of the autoclave sterilizer.
- 7. Describe universal precautions
- 8. Define blood borne pathogens, including HIV and hepatitis

## **Course Competencies:**

- 1. Pass a comprehensive exam on clinical IV procedures.
- 2. Pass a laboratory proficiency procedure on the proper use of the autoclave.

# CP 140 Clinical Procedures V

This course provides an overview of the medical assistant's responsibility regarding minor, in-office surgical procedures to include asepsis, gloving procedures, armamentarium, basic procedures, and medications. Overview of general instrument classification associated with a general medicine practice.

- 1. Explain the medical assistant's role in minor surgical procedures.
- 2. Describe wounds and the healing process
- 3. Define surgical asepsis.
- 4. Identify instruments used in minor surgical procedures.
- 5. Describe the protocol for maintaining a sterile field.

- 6. Demonstrate donning/doffing surgical gloves.
- 7. Demonstrate maintaining a sterile field

- 1. Pass a comprehensive exam on clinical V procedures.
- 2. Pass a laboratory proficiency exam on proper asepsis technique while donning/doffing surgical gloves.
- 3. Pass a laboratory proficiency exam regarding the setting up of a sterile field.

# **EKG 201** Electrocardiography

This course provides comprehensive instruction on electrocardiographs, including an overview of cardiovascular system, characteristics of normal electrocardiogram rhythms, procedures and quality assurance protocol. Upon completion of this course, students will be eligible to take the national certification exam.

## **Course Objectives:**

- 1. Describe the anatomy and physiology of the heart.
- 2. Explain the conduction system of the heart.
- 3. Describe the basic patterns of an ECG.
- 4. Identify artifacts and potential equipment problems.
- 5. Identify the components of an ECG machine.
- 6. Describe how an ECG is interpreted.
- 7. Demonstrate the proper procedure for conducting an ECG.

# **Course Competencies:**

- 1. Pass a comprehensive exam on electrocardiograph procedures.
- 2. Pass a laboratory proficiency procedure while performing an ECG.

#### CS 103 Career Development

This course offers an introduction to successful interviewing and resume development techniques. In addition, it provides information on effective networking and seeking out the appropriate job. Instruction is provided on correct workplace habits, professionalism, and maintaining a positive attitude.

# **Course Objectives:**

- 1. Demonstrate effective interviewing techniques.
- 2. Create a professional resume.

# **Course Competencies:**

- 1. Complete a mock interview with a Career Advisor.
- 2. Develop a professional resume with a Career Advisor and submit to three job postings.

# NPC 114 NCCT Preparation Course 60 Hours Lecture 60 Lab 0

This course provides comprehensive instruction in the core competencies associated with being a nationally recognized medical assistant through the National Center for Competency Testing (NCCT). The course includes medical topics including anatomy and physiology, medical terminology, medical office operations, patient exam, and medical procedure techniques.

#### **Course Objectives:**

1. Identify the anatomical parts of the human and their physiology interaction.

- 2. Describe medical terms and abbreviations associated with the medical profession.
- 3. Describe the procedures and responsibilities associated with the medical office practice.
- 4. Explain the procedural steps in performing patient examinations and medical procedures to include specimen collection, quality assurance testing, patient positioning, and ambulation assistance.
- 5. Describe Universal Precaution and other safety precautions associated with the medical practice and patient care.

1. Pass a comprehensive exam on national core competency testing for medical assistants.

# EX 110 Externship for MA

Students will extern 160 hours in a medical setting under the direct supervision of the facility administrator and general supervision of the School's program director. Students will receive hands-on application of their recently acquired medical skills and will develop the confidence to secure a career position.

# **Course Objectives:**

Satisfactorily complete externship.

# **Course Competencies:**

Demonstrate introductory proficiency in the medical assisting profession.

# CP 118 Anatomy & Physiology for ECG

This course provides an overview of the human body. It introduces students to the structure, function, and diseases of the human body. It also introduces students to related terminology used in the clinical settings to describe body positions and parts. Emphasis will be on cardiovascular system.

# **Course Objectives:**

- 1. Describe structural organization of the human body.
- 2. Identify body systems.
- 3. Describe terms associated with body planes, directional terms, quadrants, and cavities.
- 4. Describe cardiovascular system.
- 5. Define Homeostasis
- 6. Describe the effects of treatment and medication administration to various body systems.

# **Course Competencies:**

Pass a comprehensive exam on Anatomy and Physiology related to EKG/ECG.

# CP 118 Medical Terminology for ECG

This course introduces the student to medical terminology as they relate to the anatomical structure of the human body. Introduction to body system root words, prefixes, suffixes, and introductory terminology. Emphasis is on cardiovascular system terminology. Medical language and accepted medical abbreviations related to electrocardiograms.

- 1. Explain how medical terms are formed.
- 2. Describe the proper procedure for pluralizing.
- 3. Describe the four-word parts used to build medical terms.
- 4. Define common medical combining forms.

- 5. Identify terminology related to the cardiovascular system.
- 6. Define commonly accepted medical term abbreviations related to ECGs.
- 7. Define commonly accepted medical term symbols related to ECGs.

Pass a comprehensive exam on medical terminology related to ECGs.

# **EKG 190** Electrocardiography Procedures

This course provides comprehensive instruction on electrocardiographs, characteristics of normal electrocardiogram rhythms, procedures, and quality assurance protocol. Upon completion of this course, students will be eligible to take the national certification exam.

# **Course Objectives:**

- 1. Explain the conduction system of the heart.
- 2. Describe the basic patterns of an ECG.
- 3. Identify cardiovascular medications and effects.
- 4. Identify artifacts and potential equipment problems.
- 5. Identify the components of an ECG machine.
- 6. Describe how an ECG is interpreted.
- 7. Demonstrate the proper procedure for conducting an ECG.

# **Course Competencies:**

- 1. Pass a comprehensive exam on electrocardiograph procedures.
- 2. Pass a laboratory proficiency procedure while performing an ECG.