

CATALOG

2012

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By

MAYFIELD COLLEGE

Mayfield College: Cathedral City Campus

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Mayfield College: 29 Palms Campus

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GENERAL

State Approval, Accreditation and Other Approvals

Mayfield College's approval to operate in the State of California is based on provisions of the California Private Postsecondary Education Act (CPPEA) of 2009, effective January 1, 2010. Mayfield College, under section 94802(a) of CPPEA, will by operation of law, be approved until May 14, 2012. The Act is administered by the Bureau for Private Postsecondary Education, under the Department of Consumer Affairs. The Bureau can be reached at P.O. Box 980818, Sacramento, CA 95798-0818, 916.574.7720.

Mayfield College is accredited by the Commission of the Council on Occupational Education.

Mayfield College is approved by the California State Approving Agency to enroll veterans and other eligible persons.

In addition, Mayfield College is affiliated or actively participating in the following organizations: California Association of Private Postsecondary Schools (CAPPS) and the Chamber of Commerce for Cathedral City, Palm Springs, Palm Desert, Rancho Mirage and Indio.

Approved Courses	Clock Hours	Academic Semester Credit Hours	Financial Aid Credit Hours	Weeks
General Office Advanced	729	31	22	40
Medical Front Office Advanced	725	33	22	40
Computer Support Technician Advanced	725	33	22	40
Heating, Ventilation, and Air Conditioning	720	35	22	40
Medical Assisting	720	36	22	40
Massage Therapy	1,080	56	34	64
HVAC/R Level 1 Advanced	80	--	--	5
HVAC/R Level 2 Advanced	80	--	--	5
HVAC/R Level 3 Advanced	80	--	--	5
Heat Pump Training Advanced	130	--	--	8
Heat Training Advanced	220	--	--	14
Refrigeration and Air Conditioning Advanced	220	--	--	14
Electricity Advanced	190	--	--	12
Controls Training Advanced	190	--	--	12
Heating, Ventilation, and Air Conditioning (AAS)	1,220	66	32	65

Instruction is in residence for all programs. All courses are taught at 35-325 Date Palm Drive, Cathedral City, CA 92234. Our Cathedral City location is approximately 25,000 square feet in size. The maximum class size depends on the classes and the module. In general, lab classes are a maximum of 20:1, and lecture classes are a maximum of 20:1. Students who successfully complete a course of study are awarded an appropriate certificate certifying their graduation. Library resources are available for use that includes video tapes, CDs and DVDs, as well as current magazine publications and medical books. Resources are accessible on campus in the student resources center/library and online. Students may access the on-campus student resources center/library Monday thru Friday 8:00 am to 5:00 pm. There is a check-in check-out system for removing resources from the student resources center/library.

The Heating, Ventilation, and Air Conditioning (AAS), Heating, Ventilation, and Air Conditioning (Certificate), HVAC/R Level 1 Advanced, HVAC/R Level 2 Advanced, HVAC/R Level 3 Advanced, Heat Pump Training Advanced, Heat Training Advanced, Refrigeration and Air Conditioning Advanced, Electricity Advanced, and Controls Training Advanced are taught at 73680 Buena Vista,

Twenty-nine Palms, California 92277. Our 29 Palms location is approximately 5,000 square feet in size. The maximum class size depends on the classes and the module. In general, lab classes are a maximum of 20:1, and lecture classes are a maximum of 20:1. Students who successfully complete a course of study are awarded an appropriate certificate certifying their graduation. Library resources are available for use that includes video tapes, CDs and DVDs, as well as current magazine publications and medical books. Resources are accessible on campus in the student resources center/library and online. Students may access the on-campus student resources center/library Monday thru Friday 8:00 am to 5:00 pm. There is a check-in check-out system for removing resources from the student resources center/library.

Mayfield College is authorized for WIA voucher training and military Tuition Assistance program and is approved by the California State Approving Agency to enroll veterans and other eligible persons. The school has available private payment plans. Mayfield College also trains for various insurance companies for the vocational rehabilitation of their clients.

Mayfield College has never filed for bankruptcy petition, operated as a debtor in possession nor had a petition of bankruptcy filed against it under Federal law.

All information in the content of this school catalog is current, correct and is certified as true by Kevin Ha, Campus President.

Kevin Ha

Kevin Ha, Campus President

Hours of Operation

The school’s business hours are Monday through Thursday 8:00 a.m. until 10:00 p.m and Friday from 8:00 a.m. until 5:00 p.m. For additional information about the school, contact the Admissions Department.

Legal Control

Mayfield College is a private, postsecondary school. It is owned by Mayfield College, Inc., a Delaware Corporation. The school is in compliance with all local, state, and federal laws and regulations.

Academic Calendar 2012

Observed Holidays

January 16
February 20
May 28
July 4
September 3
November 22
Dec. 24 – Dec 28

Martin Luther King, Jr.
President’s Day
Memorial Day
Independence Day
Labor Day
Thanksgiving
Winter Break

Registration is continuous.

Mission Statement

Our mission at Mayfield College is to provide training for entry-level positions in specialized technical fields. It is the everyday goal of Mayfield to assist individuals in learning new skills and/or enhancing previously obtained skills, through continuing education or vocational education. We strive to fulfill both the needs of the individual seeking employment and the community. Mayfield is committed to providing a quality education that includes career development skills such as work ethics, professionalism and self-discipline which will provide our graduates with a competitive edge through any economic environment.

Consumer Protection

Any questions a student may have regarding this catalog that have not been satisfactorily answered by the institution may be directed to: Bureau for Private Postsecondary Education, P.O. Box 980818, Sacramento, CA 95798-0818, www.bppe.ca.gov, 888.370.7589, 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.

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 or by completing a complaint form, which can be obtained on the Bureau’s Internet web site www.bppe.ca.gov.



General Admission Requirements

Due to special needs and on-the-job circumstances, certain courses may have additional admissions requirements. See the description of specific programs for additional details. Prospective students who have a high school diploma or a recognized equivalency certificate (GED) are required to:

- Provide a copy of high school diploma, an official high school transcript or GED certification or fill out a transcript request and we will try to obtain a copy of the document.

Applicants who do not possess a high school diploma or GED Certificate may also apply if they demonstrate the ability to benefit. However, the number of students enrolled under the Ability to Benefit provision is limited. Students seeking enrollment under the ATB provision will take a nationally recognized and Department of Education approved test. This test will be independently administered. Applicants who fail this test can be retested using the test developer's guidelines. Students must begin class within one year of their test date. Students who withdraw after starting class, or are terminated and re-enter more than one year after their test date, must retake this test again.

Students entering the Associates of Applied Science degree programs are required to provide a copy of their high school diploma, an official high school transcript or GED certification or fill out a transcript request and we will try to obtain a copy of the document. Applicants who do not possess a high school diploma or GED Certificate will not be eligible to apply for the Associates of Applied Science degree programs.

The school reserves the right to reject applicants based on test scores and ability to benefit limitations, or as necessary to comply with any applicable local, state or federal laws, statutes or regulations.

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 a.m. to 5 p.m. Monday through Friday. One of our Admissions

Representatives will guide the applicant through the following steps:

1. Answering questions about the school and the programs offered
2. Touring our facilities and equipment
3. Arranging for applicable test(s)

The admissions process is comprised of the following steps:

1. Complete the Student Evaluation Questionnaire
2. Meet with an Admissions Representative
3. Tour the facilities
4. Complete the Enrollment Application
5. Meet with a Financial Aid Officer
6. Complete the Financial Aid process
7. Attend an Orientation Session prior to the start date of class

Applicants who are high school graduates or who have earned a high school equivalency diploma (G.E.D.) will be asked to show proof by bringing in the original diploma or fill out a transcript request. We will send for a copy of the transcript for the student's records.

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 for which the student is re-entering. Any prior balances must be cleared before the student will be permitted to re-enter.

Orientation and Requirements for Admission

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

Transfer Between Programs

If a student wishes to transfer between programs at Mayfield College, the student must receive prior approval from the School Director.

Transfer Credits

Mayfield College will give credit to a 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 as it relates to the program the student wishes to enroll in at Mayfield College. The School will evaluate the credits earned and convert those into clock hours, prorate the tuition and charge the student the difference. A maximum amount of 75% of the total clock hours of any program may be transferred in. Mayfield College does not accept experiential learning credits.

Mayfield College will award appropriate undergraduate level credit for extra-institutional learning through practices that reflect the principles and guidelines in the statement on Awarding Credit for Extra-institutional Learning. This shall include awarding credit through use of one or more of the nationally recognized, non-traditional learning testing programs provided for service members by the OSD, such as described in the ACE Guide to Educational Credit by Examination. These examinations include CLEP, DSST, and ECE.

Articulation Agreements

This Institution has not entered into any transfer or articulation agreements with any other colleges or universities.

Notice Concerning Transferability of Credits and Credentials Earned at our Institution

The transferability of credits you earn at Mayfield College is at the complete discretion of the institution to which you are seeking to transfer. Acceptance of the credits you earn in any one of the Mayfield College programs is also at the complete discretion of the institution to which you are seeking to transfer. If the credits you earn at Mayfield College are not accepted at the institution to which you are seeking 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 enrollment at Mayfield College will meet your educational goals. This may include contacting the institution to which you are seeking to transfer after attending Mayfield College to determine if your certificate or credits will transfer.

Transcripts

Mayfield 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. Transcripts will be denied if the student has an outstanding balance against her/his account.

Transcript Fee

Applicants who request an official transcript or G.E.D. test score through the school are assessed a non-refundable \$5 fee.

STUDENT SERVICES

Placement Services

The School provides placement assistance to all our graduates, exclusive of seminar participants. However, it is understood that the School does not and cannot promise or guarantee neither employment nor level of income or wage rate to any Student or Graduate. Students will be given assistance in career preparation including how to prepare a professional resume, fill out employment applications, and learn interviewing techniques. Our Placement Department will assist students in applying for jobs that fit each student's qualifications.

Drug and Alcohol Abuse Prevention Policy

It is a policy of Mayfield College to maintain a drug and alcohol-free workplace and campus. The illegal possession, use or distribution of drugs or alcohol by students, staff, and faculty members is a violation of Mayfield College's rules as well as State and Federal law. The Board of Directors at Mayfield College has directed employees to report drug and alcohol abuse with State and Federal agencies. Mayfield College upholds high standards of conduct for both employees and its students. Mayfield College prohibits the following acts:

1. Use, possession, manufacture, distribution or sale of illegal drugs or drug paraphernalia on campus premises or while on off-campus field trips either during or after working hours.
2. Unauthorized use or possession or manufacture, distribution, or sale of a controlled substance while on campus premises, or while engaged on school business or attending school activities either during or after working hours.
3. Unauthorized use, manufacture, distribution, possession, or sale of alcohol on campus premises or while on school activities either during or after working hours.
4. Storing in a locker, desk, vehicle, or other place on school premises, any unauthorized controlled substances, drug paraphernalia or alcohol.
5. Use of alcohol off school premises that adversely affects an employee's or student's work or academic performance, or an employee's or student's safety or the safety of others.
6. Possession, use, manufacture, distribution or sale of illegal drugs off campus premises that adversely affects the employee's work performance or the student's academic performance, or an employee's or student's safety or the safety of others.
7. Violation of State or Federal laws relating to the unauthorized use, possession, manufacture, distribution or sale of alcohol, controlled substances or drug paraphernalia.
8. For employees, failure to notify an employee's supervisor of an employee's arrest or conviction under any criminal drug statute as a result of a violation of law which occurs at Mayfield College.

Students may obtain copies of the complete Alcohol and Drug Prevention Policy from the Student Services Office.

Voters Registration Form

Voter registration forms are available in the administrative office.

Housing

Mayfield College does not assume responsibility for student housing, does not have dormitory facilities under its control, nor offers student housing assistance. According to rentals.com for Cathedral City, CA, rental properties start at approximately \$1,100.00.

ACADEMICS**Faculty and Curriculum**

The Faculty members of Mayfield 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 instructors for assistance when needed. Curricula for all programs have been designed, not only to provide career skills, but also to qualify students for immediate employment opportunities in a relatively short period of time.

General Office Advanced Program:

Please see Addendum A

Medical Front Office Advanced Program:

Please see Addendum B

Computer Support Technician Advanced Program:

Please see Addendum C

Heating, Ventilation and Air Conditioning Programs:

Please see Addendum D

Medical Assisting Program:

Please see Addendum E

Massage Therapy Program:

Please see Addendum F

Policy and Program Modification

In keeping with the school's 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.

Books and Supplies

The costs of books and supplies used in instruction are included in the total program cost. Additional supplies and services, such as notebooks, note paper, highlighters, pens, pencils and erasers, etc., must be provided by the

student.

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

Mayfield 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 placed on attendance probation if he or she is below 75% attendance in any given module. Frequent tardiness and/or unexcused absences are cause for placing a student on probationary status. Unsatisfactory progress and automatic termination from the program will result from fourteen (14) consecutive calendar days of absence.

<i>Attendance Probation:</i>	A student will be placed on attendance probation if he or she is below 75% attendance in any given module. The student must bring their attendance above 75% by the end of the following module to be removed from probation. A student may be placed on probation for a maximum of two modules before dismissal is recommended.
<i>Consecutive Hours Absent:</i>	A student who has missed fourteen (14) consecutive calendar days and does not return on the fourteenth (14) day will be terminated from school on that day.
<i>Tardiness or Leaving Early:</i>	Students who are late to class or who leave class 15 - 60 minutes early are considered tardy. Tardiness on four separate occasions will constitute one (1) day of absence and be recorded on their attendance record.
<i>Attendance Probation Removal: Time period Effects of meeting/not meeting Times placed</i>	If the 75% attendance is not achieved at the conclusion of the second probationary period, the student will be terminated.
<i>Attendance Appeal Process:</i>	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 through the appeal process.

Leave of Absence Policy

While enrolled in school, students may be granted leave of absences (LOA) no longer than 180 days in a 12-month period. All LOAs must be in writing and addressed to the School Director. The request must identify a reason for the leave of absence and documentation from an appropriate person or agency supporting the reason should be provided. The School Director may approve the request if there is the

likely expectation that the student will return. If a student fails to return on the scheduled return date, he/she shall be terminated from the training program.

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:

- 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 re-entry.
- They may have to wait for the appropriate module to be offered.
- Financial aid may be affected. The student will be advised of the possible loss of the student's grace period for his or her loans which would result in immediate repayment.

Grading Policies 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 70%. A student who fails a class is permitted to continue in her/his studies as long as satisfactory progress is maintained. Any subject 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:

A = 4.0	=	100 - 90%	Excellent
B = 3.0	=	89 - 80%	Good
C = 2.0	=	79 - 70%	Average
D = 1.0	=	69 - 60%	Below Average
F = 0	=	Below 59%	Failing

<i>Incomplete:</i>	An incomplete grade may be given for incomplete class assignments and/or examinations only with permission from the instructor. The <i>I</i> grade will be converted to an F grade if the incomplete is not made up within one week after the following module begins.
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Make-up work

Absences from class cannot be made up. However, students will be required to make up all assignments, examinations or other work missed as the result of any excused or unexcused absence. Upon returning to school, the student must immediately arrange to meet with the instructor regarding missed requirements. Upon instructor approval, the student must make up assignments within five (5) days and examinations within two (2) days of returning from an absence. The instructor may assign additional outside assignments if deemed necessary.

All arrangements are subject to the approval by the School Director.

Grading Policies for Externship For programs requiring an externship, the policies and grading 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 in the extern facility, she/he will be required to return to school for remedial assistance and/or serve additional externship hours.

Satisfactory Academic Progress

All students must maintain satisfactory academic progress in order to remain eligible to remain enrolled in the institution and to remain eligible for financial aid. Satisfactory academic progress is based on a qualitative component, which is based on cumulative GPA, and a quantitative component, which consists of a maximum timeframe in which a student must complete his or her program. In order to maintain satisfactory academic progress, students must:

- Maintain a cumulative grade percent average (GPA) of at least 70 percent (on a scale of 0-100 percent) (qualitative component);
- Complete the eligible programs within 1 1/2 times the normal published time frame (quantitative component); and
- For the quantitative measure, students must successfully earn 67% of the credits attempted. Satisfactory academic progress will be measured at 50% and 100% of the program.

Satisfactory academic progress is evaluated at the midpoint and at the end of the program.

If a student changes programs, Mayfield College will not include the credits attempted and grades earned from the prior program toward the student's new program.

Probation and Termination

If at midpoint and at the end of the program the student does not maintain at least a 70% cumulative GPA or at least a 67% completion rate, the student will be placed on probation. While on probation, the student will be considered making satisfactory academic progress and will remain eligible for financial aid. Students will be allowed to remain on probation for one payment period. At the end of the period of probation, if the student does not meet the minimum standards of at least a 70% cumulative GPA or at least a 67% completion rate, the student will be terminated from Mayfield College.

Reinstatement and Re-establishment of Financial Aid Eligibility

Students who have been terminated for failing to maintain satisfactory academic progress may be reinstated through the appeals process. In the appeals process, a student may provide a written statement describing the mitigating circumstances to the School Director which may or may not result in the student's reinstatement at Mayfield College. Students are not eligible for financial aid during this appeals process. If a student is re-admitted to Mayfield College through the appeals process, the student will be placed on probation and will be allowed one more payment period to be eligible for financial aid. At the end of the first payment period of probation after reinstatement, the following standards must be achieved or the student will be terminated: a cumulative GPA of 70% and at least a 67% completion rate at the end of probation.

Impact of Remedial Courses, Repeated Courses, Incomplete Courses and Withdrawals

Mayfield College does not provide remedial courses for students. When a student receives an Incomplete or Withdrawal from a course, or repeats a course because of an "F" grade, all credits count as credits attempted. The "I" or "W" grades are not included in the cumulative GPA. When a course is repeated, the second grade is included in the cumulative GPA.

Student Records

The institution maintains records to include the name, address, email address, and telephone number of each student who is enrolled in an education program. For each student granted a diploma or certificate, the institution maintains permanent records of the following:

1. The diploma/certificate granted and the date on which that degree or certificate was granted.
2. The courses and units on which the certificate or degree was based.
3. The grades earned by the student in each of those courses.

Family Educational Rights and Privacy Act of 1974, as amended

Mayfield College complies with the Family Educational Rights and Privacy Act (FERPA). FERPA is a federal law that protects the privacy of student education records.

Under FERPA, Mayfield College is required to:

- Provide a student with an opportunity to inspect and review his or her education records within 45 days of the receipt of a request;
- Provide a student with copies of education records or otherwise make the records available to the student if the student, for instance, lives outside of commuting distance of the school;
- Redact the names and other personally identifiable information about other students that may be included in the student's education records.

Amendment of Education Records

Under FERPA, Mayfield College must:

- Consider a request from a student to amend inaccurate or misleading information in the student's education records;
- Offer the student a hearing on the matter if the school decides not to amend the records in accordance with the request;
- Offer the student a right to place a statement to be kept and disclosed with the record if, as a result of the hearing, the school still decides not to amend the record.

Mayfield College is not required to consider requests for amendment under FERPA that:

- Seek to change a grade or disciplinary decision;

- Seek to change the opinions or reflections of a school official or other person reflected in an education record.

Disclosure of Education Records

Mayfield College must:

- Have a student's consent prior to the disclosure of education records;
- Ensure that the consent is signed and dated and states the purpose of the disclosure.

Mayfield College may disclose education records without the student's consent when:

- The disclosure is to school officials who have been determined to have legitimate educational interests as set forth in the institution's annual notification of rights to students;
- The student is seeking or intending to enroll in another school;
- The disclosure is to state or local educational authorities or accrediting bodies auditing or enforcing federal or state supported education programs or enforcing federal laws which relate to those programs;
- The disclosure is to the parents of a student who is a dependent for income tax purposes;
- The disclosure is in connection with determining eligibility, amounts, and terms for financial aid or enforcing the terms and conditions of financial aid;
- The disclosure is pursuant to a lawfully issued court order or subpoena; or
- The information disclosed has been appropriately designated as directory information by the school.

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 asks 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.

Students have the right to file a complaint with the U.S. Department of Education concerning alleged failures by Mayfield College in complying with the requirements of FERPA. The name and address of the office that administers FERPA is Family Policy Compliance Office, US Department of Education, 400 Maryland Avenue, SW, Washington, DC 20202-5901.

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

Diploma and Certificates

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

FINANCIAL AID POLICIES

Financial Assistance

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. Subject to individual qualifications, the following financial aid programs are available to students at Mayfield College,.

- Federal Pell Grant;
- Subsidized and Unsubsidized Stafford Direct Loan Programs; and
- Federal Direct Parent Loan for Undergraduate Students (PLUS)

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 students' needs and assist with deciding what programs best serve the student. Mayfield College participates in the following Title IV program funds:

Federal Pell Grant

Federal Pell grants are available to help matriculated students who have no prior undergraduate degrees. A Pell Grant is a grant from the federal government. Pell Grants are not loans and do not have to be paid back to the government after graduation.

Federal Subsidized and Unsubsidized Stafford Direct Loan Programs

The Federal Stafford Direct Loan program is the most widely-used loan program for college students. Federal Stafford Direct Loans offer many features, including:

- Low Interest rate. Stafford Direct Loans borrowed after July 1, 2006 have a fixed interest rate of 6.8%.
- No payments required while in school. Repayment begins six months after the student graduates.
- Deferment options. The student can apply for deferment of repayment while enrolled in a professional program; if the student becomes unemployed; or meets certain other conditions.

There are two types of Federal Stafford Direct Loans: Subsidized and Unsubsidized.

Subsidized Stafford Direct Loans are interest-free while the student is enrolled in college at least half-time and during the student's six-month grace period and during deferment periods. The Federal government subsidizes the student's loan by paying the interest to the lender on the student's behalf.

Unsubsidized Stafford Direct Loans accrue interest while the student is enrolled. The student can choose to pay off the interest each month while in school, or can allow the interest to accumulate until the student goes into repayment.

The student may be eligible for subsidized or unsubsidized Stafford Direct Loan funds, or both. The Financial Aid Office will determine whether the student qualifies for subsidized Stafford Direct Loan funds based on the information provided on the Free Application for Federal Student Aid (FAFSA), and depending on the student's total educational budget and other aid funds received.

Federal Parent Direct Loan for Undergraduate Students(PLUS)

The federal PLUS program is a popular financing option for parents of dependent undergraduate students. The PLUS loan is borrowed in the parent's own name. Here are some important details about federal PLUS Direct Loans:

- **Loan Amount:** Parents may borrow any amount up to the full cost of attendance as determined by Mayfield College, less any other resources. The cost of attendance includes tuition and allowances for books, personal expenses, and transportation.
- **Credit Qualification:** Parent borrowers must meet minimum credit requirements in order to borrow the PLUS loan. A credit check will be conducted when the parent begins the loan application process. If the parent does not meet the credit requirements, the parent will not be able to continue the application process. Students whose parents do not qualify for PLUS loans can borrow additional federal Stafford student loan funds.
- **Interest Rate:** PLUS loans borrowed after July 1, 2006 will have a fixed interest rate of 7.9%.
- **Repayment:** Parent borrowers begin monthly repayment within 60 days after full disbursement. The repayment period is ten years.

Mayfield College is approved by the California State Approving Agency to enroll veterans and other eligible persons under the GI Bill and dependents education assistance programs. Veterans under the Montgomery GI Bill – Active Duty (chapter 30 of Title 38 U.S.C.), the Montgomery GI Bill Selected Reserve (Chapter 1606 of title 10 U.S.C.), Post-Vietnam Era Educational Assistance (Chapter 32 of title 38 U.S.C.), and Dependents' Education Assistance (Chapter 35 of title 38 U.S.C.) should mail their Enrollment Certifications (VA Form 22-199) and Notices of Change of student Status (VA Form 22-1999b) to Department of Veterans Affairs, P.O. Box 8888, Muskogee, OK 74402-8888. VA Forms 22-199 and VA Forms 22-1999b are available in the Financial Aid Office.

Students who are funded under their private rehabilitation insurance policy must provide Mayfield College a letter from their rehabilitation counselor approving Mayfield College as an eligible training institution.

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 the following page. 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 their 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.

Because of the many changes, which occur daily in business and education, it is impossible to guarantee longstanding particulars. The School, therefore, reserves the right to modify tuition, fees and other charges without notice, but will not impose retroactively. Present tuition and fees are as follows:

<u>APPROVED PROGRAMS</u>	<u>TUITION</u>	<u>REG. FEE</u>
General Office Advanced	\$14,300	\$75.00
Medical Front Office Advanced	\$14,300	\$75.00
Computer Support Technician Advanced	\$14,300	\$75.00
Heating, Ventilation and Air Conditioning	\$15,050	\$75.00
Medical Assisting	\$14,300	\$75.00
Massage Therapy	\$14,300	\$75.00
HVAC/R Level 1 Advanced	\$1,400	\$75.00
HVAC/R Level 2 Advanced	\$1,400	\$75.00
HVAC/R Level 3 Advanced	\$1,400	\$75.00
Heat Pump Training Advanced	\$2,200	\$75.00
Heat Training Advanced	\$3,700	\$75.00
Refrigeration and Air Conditioning Advanced	\$3,700	\$75.00
Electricity Advanced	\$3,100	\$75.00
Controls Training Advanced	\$3,100	\$75.00
Heating, Ventilation and Air Conditioning (AAS)	\$18,900	\$75.00

CURRENT FEES AND TUITION:

Programs	Registration Fee Non-Refundable	Student Tuition Recovery Fund Non-Refundable	Textbooks and Materials	Uniforms	Tuition	*Total Cost
General Office Advanced	\$75.00	\$35.75	\$1,500.00	\$50.00	\$12,639.25	\$14,300.00
Medical Front Office Advanced	75.00	35.75	1,500.00	50.00	12,639.25	14,300.00
Computer Support Technician Advanced	75.00	35.75	1,500.00	50.00	12,639.25	14,300.00
Heating, Ventilation and Air Conditioning	75.00	37.63	1,500.00	50.00	13,387.37	15,050.00
Medical Assisting	75.00	35.75	1,500.00	50.00	12,639.25	14,300.00
Massage Therapy	75.00	35.75	1,500.00	50.00	12,639.25	14,300.00
HVAC/R Level 1 Advanced	75.00	3.50	500.00	50.00	771.50	1,400.00
HVAC/R Level 2 Advanced	75.00	3.50	500.00	50.00	771.50	1,400.00
HVAC/R Level 3 Advanced	75.00	3.50	500.00	50.00	771.50	1,400.00
Heat Pump Training Advanced	75.00	5.50	500.00	50.00	1,569.50	2,200.00
Heat Training Advanced	75.00	9.25	500.00	50.00	3,065.75	3,700.00
Refrigeration & Air Conditioning Adv.	75.00	9.25	500.00	50.00	3,065.75	3,700.00
Electricity Advanced	75.00	8.00	500.00	50.00	2,567.00	3,200.00
Controls Training Advanced	75.00	8.00	500.00	50.00	2,567.00	3,200.00
Heating, Ventilation, Air Conditioning (AAS)	75.00	47.00	2,000.00	50.00	16,652.50	18,900.00

* Charges for the period of attendance and the entire program.

Financial Aid Student Rights

Students have the right to know:

- Types of Financial Aid available at Mayfield 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.

If a student receives a loan to pay for the educational program, the student will have the responsibility to repay the full amount of the loan plus interest, less the amount of any refund.

Withdrawal Policy

In order to withdraw, the student may officially withdraw by notifying the Registrar's office orally or in writing. If a student does not officially withdraw, the student will be dropped after fourteen (14) consecutive absences.

Refund Policy

Refunds are issued through the Financial Aid Office when a student withdraws from all classes. The issuance of refunds is not contingent upon notification of withdrawal by the student. Refunds are made within 45 days of the school's determination of the date of withdrawal if the student did not provide notice or 45 days from the official date of notice. For students receiving funding from a third party, tuition refunds are first applied toward repayment of third party funding. Mayfield College follows the refund policies outlined in the regulations for (1) the State of California's Bureau for Private Postsecondary Education; (2) Council on Occupational Education; and (3) the US Department of Education and applies the refund policy which provides the highest refund to the student.

Student's Right to Cancel

1. You have the right cancel your 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. You have the right to receive a pro rata refund if you have completed 60 percent or less of the scheduled days in the current payment period in your program through the last day of attendance.
2. Cancellation may occur when the student provides a written notice of cancellation at the following address: Mayfield College, 35-325 Date Palm Drive, Suite 101, Cathedral City, CA 92234. This can be done by mail or by hand delivery.
3. The written notice of cancellation, if sent by mail, is effective when deposited in the mail properly addressed with proper postage.
4. 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.
5. If the Enrollment Agreement is cancelled, the school will refund the student any money he/she paid, less a registration or administration fee not to exceed \$75.00, and less any deduction for equipment not returned in good condition, within 45 days after the notice of cancellation is received.

Withdrawal from the Program

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 days in the current payment period in your program through the last day of attendance. The refund will be less a registration or administration fee not to exceed \$75.00. The refund is to be paid 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 fourteen (14) consecutive days.
- Failure 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. For the purpose of determining when the refund must be paid, the student shall be deemed to have withdrawn at the end of fourteen (14) consecutive 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, to the state or federal agency that guaranteed or reinsured the loan. Any amount of the refund in excess of the unpaid balance of the loan 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.

Return of Title IV Funds Policy

Federal regulations specify how Mayfield College must determine the amount of Title IV program assistance that the student earns if he or she withdraws from school. The Title IV programs Mayfield College participates in that are covered by this law are: Federal Pell Grants, Stafford Loans, and PLUS Loans.

When a student withdraws during his/her payment period, the amount of Title IV program assistance that the student has earned up to that point is determined by a specific formula. If the student received (or the school or parent received on his/her behalf) less assistance than the amount earned, the student may be able to receive those additional funds. If the student received more assistance than he/she earned, the excess funds must be returned by the school and/or the student.

The amount of assistance the student has earned is determined on a prorata basis. For example, if the student completed 30% of the payment period, the student earns 30% of the assistance originally scheduled to receive. Once the student has completed more than 60% of the payment period, the student earns all the assistance that he/she was scheduled to receive for that period.

If the student did not receive all of the funds that he/she earned, the student may be due a post-withdrawal disbursement. If the post-withdrawal disbursement includes loan funds, Mayfield College must get the student's permission (or parent's permission in the case of a PLUS Loan) before it can disburse the loan funds on the student's account or directly to the student or parent (in the case of a PLUS Loan).. The student may choose to decline some or all of the loan funds so that additional debt is not incurred. Mayfield College may automatically use all or a portion of the post-withdrawal disbursement for tuition and fees if the funds are grant funds. Grant funds may also be disbursed directly to the student without his/her permission. For all other educationally-related charges,

Mayfield College needs the permission of the student or parent to use the post-withdrawal disbursement.

There are some Title IV funds that the student was scheduled to receive that cannot be disbursed to the student once the student withdraws because of other eligibility requirements. For example, if the student is a first-time, first-year undergraduate student and has not completed the first 30 days of the program before the student withdraws, the student will not receive any loan funds that he/she would have received had enrollment continued past the 30th day.

If the student receives (or Mayfield College or parent on the student's behalf) excess Title IV program funds that must be returned, Mayfield College must return a portion of the excess equal to the lesser of:

1. The student's institutional charges multiplied by the unearned percentage of the student's funds, or
2. The entire amount of excess funds.

Mayfield College must return this amount even if it did not keep this amount of the student's Title IV program funds.

If Mayfield College is not required to return all of the excess funds, the student must return the remaining amount. Any loan funds that the student must return, the student (or parent for a PLUS Loan) repays in accordance with the terms and conditions of the promissory note. That is, the student makes scheduled payments to the holder of the loan over a period of time.

Any amount of unearned grant funds that the student must return is called an overpayment. The amount of a grant overpayment that the student must repay is any amount of the overpayment that is greater than half of the grant funds the student received or was scheduled to receive. The student must make arrangements with Mayfield College or the Department of Education to return the unearned grant funds.

The Title IV funds are returned in the following order:

1. Unsubsidized Federal Stafford Direct Loans;
2. Subsidized Federal Stafford Direct Loans;
3. Direct PLUS Loans; and
4. Federal Pell Grants

The requirements for Title IV program funds when the student withdraws are separate from any refund policy of Mayfield College. Therefore, the student may still owe funds to Mayfield College to cover unpaid institutional charges. Mayfield College may also charge the student for any Title IV program funds that the school was required to return. If the student does not already know about Mayfield College's refund policy, the student can ask the Financial Aid department for a copy. The Financial Aid Department can also provide the student with the requirements and procedures for officially withdrawing from school.

If the student has questions about his/her Title IV program funds, he/she 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 www.studentaid.ed.gov.

Student Tuition Recovery Fund

You must pay the state-imposed assessment for the Student

Tuition Recovery Fund (STRF) if all of the following applies to you:

1. You are a student, who is a California resident, or are enrolled in a residency program, and prepays all or part of your tuition either by cash, guaranteed student loans, or personal loans, and
2. Your total charges are not paid by any third-party payer such as an employer, government program or other payer unless you have a separate agreement to repay the third party.

You are not eligible for protection from the STRF and you are not required to pay the STRF assessment, if either of the following applies:

1. You are not a California resident, or are not enrolled in a residency program, or
2. Your total charges are paid by a third party, such as an employer, government program or other payer, and you have no separate agreement to repay the third party.

The State of California created the Student Tuition Recovery Fund (STRF) to relieve or mitigate economic losses suffered by California residents who were students attending certain schools regulated by the Bureau for Private Postsecondary and Vocational Education.

You may be eligible for STRF if you are a California resident, or are enrolled in a residency program, prepaid tuition, paid the STRF assessment, and suffered an economic loss as a result of any of the following:

1. The school closed before the course of instruction was completed.
2. The school's failure to pay refunds or charges on behalf of a student to a third party for license fees or any other purpose, or to provide equipment or materials for which a charge was collected within 180 days before the closure of the school.
3. The school's failure to pay or reimburse loan proceeds under a federally guaranteed student loan program as required by law or to pay or reimburse proceeds received by the school prior to closure in excess of tuition and other cost.
4. There was a material failure to comply with the Act or this Division within 30 days before the school closed or, if the material failure began earlier than 30 days prior to closure, the period determined by the Bureau.
5. There was an inability after diligent efforts to prosecute, prove, and collect on a judgment against the institution for a violation of the Act.

MEDICAL FRONT OFFICE ADVANCED

The objective is for students in this program to receive a solid foundation in medical terminology, medical insurance forms, medical billing software, introduction to medical transcription, processing medical documents, as well as basic business computer applications. They will be prepared to work in private physicians' offices, clinics, physicians' groups, or medical billing offices in such entry level positions as medical receptionist, medical transcriptions, medical documents processing clerk, medical billing clerk, medical insurance clerk, and insurance processing clerk.

SCHEDULE

36 Classroom Weeks - 16 hours per week

Monday through Thursday

4 hours per day

4 Weeks of Externship

Monday through Friday

hours to be arranged

40 Total Weeks

725 Clock Hours/33 Academic Semester Credit Hours/19 Financial Aid Credit Hours

Courses	Clock Hours	Academic Semester Credit Hours
Medical Law and Ethics, Health Care Data Content Structure	60	3 1/3
Computers in Healthcare	60	3 1/3
Introduction to ICD-9 Coding	60	3
Medical Office Procedures and Reimbursement Methodology	60	3 1/3
Introduction to CPT/HCPCS Coding	60	3 1/3
Insurance Processing	60	3 1/3
Medical Transcription and Coding	60	3 1/3
Introduction to Medical Front Office	60	3 1/3
Medical Terminology, Pathology, and Pharmacology	60	3 1/3
Externship	185	4 1/9
Total	725 Clock Hrs.	33 Sem. Cr. Hrs.

Medical Law and Ethics, Health Care Data Content Structure

This module presents the description of health care data content, which includes the medical records, charting and observation, as well as the different medical forms and HIPAA regulations. The lesson also presents the description of medical ethics associated with patient care, medical contracts and managed care.

Computers in Healthcare

This module presents the description of the parts and features of the computer and its usage in health care. The lesson also presents introductory information to Windows and Word applications, keyboarding and Medisoft. It will describe the basic Medisoft actions and menus that will give students an overview of its applications.

Introduction to ICD-9 Coding

This module presents the concepts and guidelines for ICD-9-CM coding. The lesson also provides information on hospital billing and the UB-04 claim form. Medisoft concepts and applications such as transaction entry, claim management, posting mail payments, balancing the day, statement management and data backup and maintenance will also be covered in this lesson.

Medical Office Procedures and Reimbursement Methodology

This module presents the concepts interpersonal communication, which includes verbal, non-verbal and written communication, and listening skills. The module also describes the patient reception, office facility, equipment and supplies, as well as office safety and security procedures. Appointment scheduling, medical records and filing concepts will also be covered. Description and methodology of reimbursement will be presented.

Introduction to CPT/HCPCS Coding

This module presents the concepts and guidelines for CPT and HCPCS coding. The lesson also provides Medisoft concepts and applications for billing charges, security setup, reporting and accounts receivable management and report designer.

Insurance Processing

This module presents the concepts and guidelines for insurance processing for physician and hospital medical billing, Medicare and Medicaid, TRICARE and Worker's Compensation. The module also provides the concept for explanation of benefits and payment adjudication, as well as the guidelines for auditing, refund and appeals processes.

Medical Transcription and Coding

This course is an introduction to medical transcription. The course covers such topics as definition of terms, correct use of terms, elimination of spelling errors, preparation of appropriate forms, and report dictation.

Introduction to Medical Front Office

This module presents the fundamental concepts of health care systems, careers and employability skills, communications, medical law and ethics and safety and security procedures. The lesson also presents a review of basic math skills and procedures for scientific process, as well as disaster preparedness.

Medical Terminology, Pathology, and Pharmacology

This module will discuss the concepts of medical terminology, including prefixes, suffixes and word roots, as well as, abbreviations and symbols. In this course, students learn the anatomy and physiology of the body systems, including vocabulary, pathology, diagnostic and therapeutic procedures. The course also provides the concepts of pharmacology, infection control, vital signs and handling office emergencies.

Externship

On-the-job-training is the focus of this portion of the program. Students will perform actual work with one of the employers that we have partnered with through our Advisory Committee. After successfully completing this portion of the program, students will have “real world” job experience that can be included in their resume, and be discussed in future interviews.

GENERAL OFFICE ADVANCED

The objective is for students in this program to acquire proficiency in all the major functions of the computer, including operating systems, word processing, spreadsheet analysis, database management, graphics, communications, and a variety of specialized application and utility programs. They will be able to function in a small, generalized office, or in a larger organization in such entry level positions as administrative assistant, administrative clerk, administrative support, general office clerk, Accounts Payable Clerk, Accounts Receivable Clerk, General Ledger Clerk, and assistant office manager. This course prepares students for the Microsoft Office Specialist (MOS) certification exams.

SCHEDULE

36 Classroom Weeks - 16 hours per week

**Monday through Thursday
4 hours per day**

4 Weeks of Externship

**Monday through Friday
hours to be arranged**

40 Total Weeks

729 Clock Hours/31 Academic Semester Credit Hours/19 Financial Aid Credit Hours

<u>Courses</u>	<u>Clock Hours</u>	<u>Academic Semester Credit Hours</u>
Introduction to Computers	25	1 2/3
Introduction to Windows	25	1 2/3
Keyboarding Skills	50	2 ½
Word Processing	104	5 ¼
Database Management	95	4 2/3
Spreadsheet Analysis	85	4 1/3
Business English	50	2 ½
Communications/Quickbooks	65	3
Graphics	65	3
Job Placement Preparation	25	1 2/3
Externship	140	3 1/9
Total	729 Clock Hours	31 Sem. Cr. Hrs

Introduction To Computers

This is a basic, introductory course to introduce students to the capabilities of the computer. Students learn to interface with a computer using an interactive CD that gives students an overview of the general operations of the computer and peripheral equipment.

Introduction To Windows

Windows creates the link between the user and the computer by providing an interface, or environment, in which one can communicate with the computer. Windows serves as the base software in which a variety of programs can operate. In this course, students learn to navigate in the Windows environment.

Keyboarding Skills

This course familiarizes students with the standard computer keyboard, function keys, 10 key pad, and their relationship to protocol used by standardized software packages. This course includes an on-going plan to increase typing speed and reduce error rate.

Integrated Software/Microsoft Office

Microsoft Office is studied. This is an integrated multi-function program that gives a basic level of expertise in word processing, database management, spreadsheets, and communications. This forms a basic understanding of the global applications of computers.

Word Processing

The basics of word processing are introduced. Windows-based Microsoft Word is presented. Students will learn formatting skills and become proficient at file management and integration of word processing functions to produce professional documents.

Database Management

Students are presented with the basics of database management using the Windows-based Microsoft Access package. They will learn to organize the storage and retrieval of information and the sorting or revision, editing, and amending of electronic data.

Spreadsheet Analysis

The manipulation of quantitative data is presented using the Windows-based Microsoft spreadsheet package called Excel. Students will become familiar with the basics of electronic spreadsheet analysis as applied in the modern business office.

Basic Electronic Bookkeeping

Students will become familiar with the basics of electronic bookkeeping. QuickBooks series software will be used. This is the basic bookkeeping course that will introduce the key concepts of bookkeeping and ready the students for advanced topics. Through this course, students will also be trained on the accepted standard practices of posting, adjusting, and closing entries in accounts receivable or payable. AR and AP are introduced, and students master the basics of the entire process.

Business English

Students will learn the effectiveness of, and how to create the three types of business documents: 1.) "How To" documents such as instructions and directions. 2.) "Workplace documents such as business letters and memos. 3.) "Informational;" documents such as mailings, etc. Workplace documents will be emphasized.

Communications/Graphics

Students will learn how to access and use the power of the Internet, using Internet Explorer. Also in this course, students will be introduced to the use of graphics in computers. Techniques such as integrating pictures and graphs into documents, scanning, and digital camera use may be utilized. Students will learn presentation techniques using a software program such as Microsoft PowerPoint or Publisher.

Job Placement Preparation

Students will design and develop their own professional resume. A review of job possibilities in the geographic area is done, with an emphasis on professional networking. Dress, presentation, and employment interviewing skills are reviewed in this course.

Externship

On-the-job-training is the focus of this portion of the program. Students will perform actual work with one of the employers that we have partnered with through our Advisory Committee. After successfully completing this portion of the program, students will have “real world” job experience that can be included in their resume, and be discussed in future interviews.

COMPUTER SUPPORT TECHNICIAN ADVANCED

The objective is for students in this program to acquire the basic skills necessary to seek, identify, locate and solve problems in computer systems and peripherals. They will be able to analyze and troubleshoot problems that are either hardware or software related. They will be able to integrate new peripherals into the normal office computer system, and install new software and hardware as systems are upgraded. This program prepares students for entry-level positions such as Computer Tech, Support Technician, and Service Field Technician. This course prepares students for the CompTIA A+ certification exam.

SCHEDULE

36 Classroom Weeks - 16 hours per week

Monday through Thursday

4 hours per day

4 Weeks of Externship

Monday through Friday

hours to be arranged

40 Total Weeks

725 Clock Hours/33 Academic Semester Credit Hours/19 Financial Aid Credit Hours

<u>Courses</u>	<u>Clock Hours</u>	<u>Academic Semester Credit Hours</u>
Introduction to Computers	25	1 2/3
Introduction to Windows	25	1 2/3
Microsoft Office	50	2 1/2
A+ Certification Training	130	6 1/2
A+ Review	50	2 1/2
Introduction to Networking	50	2 1/2
Installation	25	1 2/3
Troubleshooting Intro.	20	3 1/2
Troubleshooting Intermediate	65	1 2/3
Assembly	25	1 2/3
DOS	25	3 1/3
Software Familiarization	75	1 1/3
Job Placement Preparation	20	3 1/9
Externship	140	1 2/3
Total	725 Clock Hours	33 Sem. Cr. Hrs.

Introduction To Computers

This is a basic, introductory course to introduce students to the capabilities of the computer. Students learn to interface with a computer using an interactive CD that gives students an overview of the general operations of the computer and peripheral equipment.

Introduction To Windows

Windows creates the link between the user and the computer by providing an interface, or environment, in which one can communicate with the computer. Windows serves as the base software in which a variety of programs can operate. In this course, students learn to navigate in the Windows environment.

Microsoft Office

Students will become familiar with how to use the applications from Microsoft Office in the technical arena. Utilizing Microsoft Word to create technical documents and documentation will be emphasized. Students will learn the value of using Microsoft Excel for tracking, analyzing and charting system metric data. PowerPoint and Access will be introduced.

A+ Certification Training

This is the central focus of the program. This is the preparatory course for the industry-wide A+ Certification Program developed and sponsored by the *Computing Technology Association* (CompTIA). In this course, students will become familiar with the concepts and practices of the Information Technology Industry. All of the necessary skills needed to become a successful PC Technician will be studied in depth. This includes a detailed study of PC hardware and associated Microsoft Operating System software (Windows 9x, Windows NT, Windows 2000 and Windows XP).

A+ Review

In this portion of the course, students will study the specific questions and types of questions that will be presented in the A+ Certification Exam. Analyzing the questions, and determining how to define the best possible answer is the central theme. Students will spend much of their time taking simulated A+ Exams during this course.

Introduction to Networking

Networks dominate the modern computing environment. During this portion of the program, students will learn the fundamentals of networking technologies network operating systems, wired and wireless networks. Various troubleshooting techniques will be explored, including identifying and isolating symptoms, separating hardware problems from software problems, research, fixing and testing.

Installation

The installation of the various releases of Microsoft Windows applicable to the A+ Certification will be explored during this part of the program. Students will be given hands-on experience in performing installations and upgrades.

Troubleshooting Intro. /Intermediate

Here students will be guided through the steps necessary to properly identify and isolate the most common problems that can affect computers. During the introduction portion of the course, students will learn how to differentiate hardware from software related issues. As students progress through the course, simulated problems will be presented, and they will demonstrate how to isolate and fix the issues.

Assembly

A completely disassembled PC that needs to be reassembled and put back into working order is the challenge for students during this class.

DOS

Students will use the reassembled PC from the *Assembly* class to load the Disk Operating System (DOS). The DOS command line will be explored in detail, including DOS commands, switches and batch files. The necessary boot and configuration files will be studied. Students will learn the value of a low-level operating system versus the more complex graphical user-based Windows Operating System.

Software Familiarization

Students will use the reassembled PC from the *Assembly* Class to install Windows XP. Students will configure the system for internal networking and install various application programs in a simulated work environment. Here, students will become familiar with some of the more visible groups of programs, and their basic functions. Viruses, malicious programs, and anti-virus software will be covered during this portion of the course.

Job Placement Preparation

Students will design and develop their own professional resume. A review of job possibilities in the geographic area is done, with an emphasis on professional networking. Dress, presentation, and employment interviewing skills are reviewed in this course.

Externship

On-the-job-training is the focus of this portion of the program. Students will perform actual work with one of the employers that we have partnered with through our Advisory Committee. After successfully completing this portion of the program, students will have “real world” job experience that can be included in their resume, and be discussed in future interviews.

HEATING, VENTILATION AND AIR CONDITIONING

The objective is for students in this program to acquire the skills necessary to identify, locate and solve heating, ventilating, air conditioning and refrigeration problems in all types of buildings from residential to commercial. Students will apply theory and principles learned in the class and lab settings that will help them to develop, select, operate and test heating, ventilating and air conditioning equipment. The program emphasizes theory, as well as hands-on practice.

SCHEDULE

36 Classroom Weeks - 16 hours per week

**Monday through Thursday
4 hours per day**

4 Weeks of Externship

**Monday through Friday
hours to be arranged**

40 Total Weeks

720 Clock Hours/35 Academic Semester Credit Hours/19 Financial Aid Credit Hours

<u>Courses</u>	<u>Clock Hours</u>	<u>Academic Semester Credit Hours</u>
Air Distribution, Venting, Maintenance, and Air Conditioning	60	3 1/2
Electronics and Control Circuit Troubleshooting	60	3 1/2
Electric Heat, Accessories, Metering, and Compressors	60	3 1/2
Heat Pumps and Handling Refrigerants	60	3 1/2
Maintenance and Troubleshooting	60	3
Hydronic, Airside and Balancing Systems	60	3 1/2
Troubleshooting Systems and Indoor Qualify Systems	60	3 1/2
Refrigeration	60	3 1/2
Codes & Licenses, Energy, Water Treatment, and Building Mgmt.	60	4
Externship	180	4
Total	720 Clock Hrs.	35 Sem. Cr. Hrs.

Air Distribution/Venting/Maintenance/Air Conditioning

This course covers the fundamentals of air distribution systems used in air conditioning. The student is given instruction in the fundamentals and principles of human comfort, psychometrics, heat transfer and how to calculate heating and cooling loads. The course also covers fan fundamentals, types of distribution systems, heating and cooling apparatus, and the controls of system operations. Topics include air conditioning and heat pump technology covering commercial and residential air conditioning and the characteristics and operation of heat pump systems. The electrical and mechanical systems will be studied and analyzed. Students will study the procedures for the installation, maintenance, troubleshooting and repair of dehumidifiers, room air conditioners, and split systems. Instruction will be given on air conditioning and heat pump controls and diagnostic procedures.

Electronics/Control Circuit Troubleshooting

Study of AC and DC circuits, the use of electrical meters, reading electrical diagrams, electrical distribution systems in residential and commercial buildings and the installation of electrical equipment. Sections of the National Electrical Code are also studied. Provides the foundational knowledge and skills to understand and safely install, service, and troubleshoot HVAC/R electrical circuits and electronics. Topics include basic electrical theories, HVAC/R electricity and electronic symbols and schematics, proper meter usage, motors, controls, and other electrical/electronic devices. The sequence of operation and diagnostic troubleshooting, utilizing pictorial, schematic, and hands-on approaches are also stressed.

Electric Heat/Accessories/Metering/Compressors

This course will cover the necessary skills to be able to maintain, troubleshoot and install electrical heat. It will cover the many differing applications of electric heat and will allow for the learner to become confident in the service and installation of electric heat appliances. The components and controls of electric heat will be covered in detail as to allow the learner to think sequentially in the processes required for troubleshooting electric heat sources. Safety in electricity will be covered extensively.

Heat Pumps/Handling Refrigerants

Upon successful completion of this course, the student should be able to identify the function of all components and accessories of all electric and dual heat pump systems. Topics will include electric heat and heat pump fundamentals, principles and applications; refrigerant flow controls; defrost cycle controls; heat pump thermostats; indoor air distribution; dual fuel controls; and change-over stats. Emphasis will be on the electrical diagrams and mechanical principles of operation. These systems, as well as practical instruction in service and diagram procedures and techniques for the efficient operation, maintenance, troubleshooting and repair of these systems, will make up the lab portion of the course.

Maintenance and Troubleshooting

Upon successful completion of this course, the student will be able to identify techniques and procedures used in the residential construction industry to determine proper sizing of HVAC equipment and ducts to meet the requirements for a high-quality, comfortable climate in terms of heating, cooling, humidifying, dehumidifying, ventilation and air cleaning or filtering.

Hydronic/Airside/Balancing Systems

This course provides the theory and practice in fluid measuring methods and instrumentation. Emphasis is placed on working with instruments such as pitot tube devices and velometers to illustrate the interaction of fluid systems curves. Course content also includes air psychometries, air and hydronic system balancing and measurement of sound.

Troubleshooting Systems/Indoor Air Quality Systems

This course introduces the techniques of assessing and maintaining the quality of the indoor environment in residential and commercial structures. Topics include handling and investigating complaints, filter selection, humidity control, testing for sources of carbon monoxide, impact of

mechanical ventilation, and building and duct pressures. Upon completion, students should be able to assist in investigating and solving common indoor air quality problems.

Refrigeration

An introduction to the refrigeration cycle, basic thermodynamics, heat transfer, temperature/pressure relationship, safety, refrigeration containment, and refrigeration components.

Codes and Licenses/Energy/Water Treatment/Building Management

HVAC theories and concepts with special emphasis on the understanding and documentation of the codes and regulations required for the State of California. This course specifies cleaning and treatment of circulating HVAC water systems, including cleaning compounds, chemical treatment for closed loop heat transfer systems, chemical treatment for open loop systems, and glycol-water heat transfer systems.

Externship

This course will provide the student with an opportunity to use the skills acquired from classroom instruction in a "real life" setting. Students will be placed with an HVAC department within an outside business as an extern where the staff will provide opportunities for practical application of the student's skills.

MEDICAL ASSISTING

The objective is for students in this program to specialize 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.

SCHEDULE

36 Classroom Weeks - 16 hours per week

**Monday through Thursday
4 hours per day**

4 Weeks of Externship

**Monday through Friday
hours to be arranged**

40 Total Weeks

720 Clock Hours/36 Academic Semester Credit Hours/19 Financial Aid Credit Hours

<u>Courses</u>	<u>Clock Hours</u>	<u>Academic Semester Credit Hours</u>
Health Care Concepts and Health Care Delivery Services	60	4
Medical Office Administration and Basic Patient Care	60	4
Clinical Medical Assisting	60	3 1/3
Pharmacology and Administration of Medications and Office Emergencies	60	3 1/3
Medical Billing and Financial Management	60	3 1/3
Medical Insurance Processing and Computerized Medical Coding Procedures	60	3 1/3
The Medical Laboratory	60	3 1/3
Electrocardiography and Radiology	60	3 1/3
Psychology, Professionalism, and Human Resources	60	4
Externship	180	4
Total	720 Clock Hours	36 Sem. Cr. Hrs.

Health Care Concepts and Health Care Delivery Services

This module presents the basic concepts that all health care providers need to understand, including health care delivery systems, communication and interpersonal skills, medical law and ethics, wellness, disease, and infection control, safety, quality assurance, and security procedures in health care, medical and surgical asepsis, and basic computer literacy. The module will also provide basic medical terminology related to prefixes, suffixes, word roots, abbreviations, and symbols. Students will also be introduced to the study of anatomy and physiology and diseases processes.

Medical Office Administration and Basic Patient Care

This module presents the concepts of patient reception, appointment scheduling, communications (verbal and nonverbal and written), and telephone techniques. The module also covers the skills and knowledge of basic patient care, which includes taking vital signs, assisting with physical

examinations and medical specialties. In addition, the module presents the anatomy and physiology of the skeletal and muscular systems.

Clinical Medical Assisting

This module presents the concepts of clinical medical assisting in pediatrics, geriatrics, eye and ear care, and minor surgery, and physical therapy. In addition, the module presents the medical terminology and anatomy and physiology related to the nervous systems and the special senses.

Pharmacology and Administration of Medications and Office Emergencies

This module presents the concepts required to learn about pharmacology and the various routes of administration of medication. In addition, the module will cover the medical terminology and anatomy and physiology related to the integumentary system.

Medical Billing and Financial Management

This module presents the concepts and applications for managing medical records, filing, and manual medical billing and claims processing. Accounting, bookkeeping, banking and medical office management are also discussed in the module. The module will also discuss the description and classification of medical law and ethics. In addition, the module will cover the medical terminology and anatomy and physiology related to the endocrine system.

Medical Insurance Processing and Computerized Medical Coding Procedures

This module presents the concepts and applications involved in processing medical insurance claims, as well as the computerized coding of these claims. Students will learn how to utilize the electronic medical billing software Medisoft. The module will also cover the medical terminology and anatomy and physiology related to the digestive system.

The Medical Laboratory

This module presents the concepts and applications involved in working in the medical laboratory. This will include basic laboratory procedures, diagnostic clinical procedures, transporting, accessioning, and processing specimens, collection procedures, supplies and equipment and performing phlebotomy in the health care setting. The module will also cover the medical terminology and anatomy and physiology related to the circulatory and lymphatic systems.

Electrocardiography and Radiology

This module presents the concepts and applications involved in identifying and performing basic EKG tracings and assisting in radiology procedures. The module will cover patient care techniques related to EKG testing, legal and ethical responsibilities related to electrocardiography, application and use of medical instrumentation modalities related to electrocardiography, cardiovascular emergency equipment and procedures, and basic x-ray procedures. The module will also cover the medical terminology and anatomy and physiology related to the cardiovascular and respiratory systems.

Psychology, Professionalism, and Human Resources

This module presents concepts related to psychology, professionalism in the health care environment, job preparation, and human resources. The module will also cover the medical terminology and anatomy and physiology related to the urinary and reproductive systems, as well as basic procedures affecting these systems.

Externship

On-the-job-training is the focus of this portion of the program. Students will perform actual work with one of the employers that we have partnered with through our Advisory Committee. After successfully completing this portion of the program, students will have “real world” job experience that can be included in their resume, and be discussed in future interviews.

MASSAGE THERAPY

The Massage Therapy certificate program has been designed to prepare students for entry-level employment as a massage therapist and/or to enter private practice. Graduates of the program may enter the field working in massage offices and private practice, physicians' offices, hospitals and medical centers, chiropractic offices, nursing facilities, outpatient clinics, health clubs and fitness centers, spas and resorts, hotels, cruise ships, beauty and hair salons, pain management centers, sports team facilities, as well as, setting up individual private practices.

SCHEDULE

55 Classroom Weeks - 16 hours per week

**Monday through Thursday
4 hours per day**

5 Weeks of Externship

**Monday through Friday
hours to be arranged**

60 Total Weeks

1080 Clock Hours/56 Academic Semester Credit Hours/28 Financial Aid Credit Hours

Courses	Clock Hours	Academic Semester Credit Hours
Advanced Anatomy and Physiology	60	4
Biometrics and Kinesiology	60	4
Medical Terminology	60	4
Clinical Pathology	60	4
Massage Theory	60	4
Massage Application and Techniques I	60	3
Massage Application and Techniques II	60	3
Massage Application and Techniques III	60	3
Restorative Medical Massage Techniques	60	3
Massage and Bodywork Modalities I	60	3
Massage and Bodywork Modalities II	60	3
Health Service Management	60	4
Holistic Principles and Touch I	60	3
Holistic Principles and Touch II	60	3
Professional Standards, Ethics and Business Practices, and Career Development	60	4
Externship	180	4
Total	1080 Clock Hours	56 Sem. Cr. Hrs.

Advanced Anatomy and Physiology

Essential principles of human anatomy and physiology are presented, including basic chemistry, cell and tissue studies, and an overview of all the body systems. This includes the study of cells, tissues, and the integumentary, skeletal, muscular and nervous systems. The endocrine, cardiovascular, lymphatic, respiratory, digestive, urinary and reproductive systems, as well as the concepts of development, metabolism, fluid and electrolyte balance, and acid-base balance are included.

Biomechanics and Kinesiology

This course provides students with an understanding of biomechanical principles of movement and their application to massage therapy and human performance including current technologies to enhance human performance. Concepts of cardiovascular, respiratory, and thermoregulatory responses to physical activity will be examined and applied to situations encountered in daily life including recreational activities, sport, and massage therapy.

Medical Terminology

This medical terminology course will focus on the many components of a medical term and how to break down a medical term by simply knowing the meaning of the prefix or suffix. The student acquires an understanding of medical meanings applicable to the structure, function, and diseases of the human body. Abbreviations and their appropriate usage are represented.

Clinical Pathology

This course covers the study of biochemical, structural, and functional changes in cells, tissues and organs, which cause or are caused by diseases. The goal of the course will be to expand and extend the student's knowledge of normal structure and function, into the realm of disease processes. The course also provides a foundation for understanding clinical pathology as it relates to Massage Therapy.

Massage Theory

This course introduces the student to the basics of Swedish massage. They learn how to perform a full body massage as well as indications, contraindications, and physiological effects for massage. Also covered are history of massage, hygiene, safe draping, body mechanics, and the interview process. In this course the student will learn how to give a 15 minute on-site massage utilizing their basic Swedish massage techniques and pressure point work. Students also learn how to create a successful on-site business and have the opportunity to use their skills while working with the public.

Massage Application and Techniques I

This class delves deeper into the concepts and applications of bodywork. It looks at several applications of deeper structural work and the deeper postural muscles and fascia. Trigger point work, myofascial release, and postural release work will be included. Students will also learn how to focus their intention to create an overall experience as well as effective treatment massage session.

Massage Application and Techniques II

Students receive hands-on training in skill and knowledge needed to perform full-body hot stone massage. They are also introduced to aromatherapy, reflexology, paraffin, body wrap treatments, and hydro/cryotherapy. Each student performs hands-on applications of hot stone and select spa techniques in a clinic setting involving non-class participants. Students receive hands-on training in skills and knowledge needed to affect and manipulate deep tissue in full-body deep tissue routines.

Massage Application and Techniques III

This course offers exploration of advanced massage techniques for each segment of the body and combination of routines into a full-body general massage. Traditional massage strokes, passive stretches, the development of touch and pressure sensitivity, clinical precautions and sanitation practices are included.

Restorative Medical Massage Techniques

Unlike general massage which uses broad techniques for relaxation; students are exposed to medical massage which is anatomically precise and patient specific. Therapeutic, corrective and restorative massage techniques will be taught.

Massage and Bodywork Modalities I

This course focuses on the development of knowledge and massage techniques to affect deep layers of tissues and specific muscular structures. Topics include the use of pressure and monitoring pain. Physical skills focus on body mechanics, palpation skills, stretching techniques and deep tissue massage techniques.

Massage and Bodywork Modalities II

This course introduces the student to the various types of physical therapy and massage modalities. Body mechanics, therapeutic exercise, gait training and basic treatment methods are learned. Also studied are hot and cold therapy and massage. Students develop skills in utilizing these modalities and procedures in assisting with the comprehensive implementation of a physical therapy treatment plan.

Health Service Management

Students learn basic business practices which include: Promoting and Marketing massage therapy, legalities of a massage practice, professional ethics, financial management, office and telephone procedures, resume writing, interview skills and client record keeping.

Holistic Principles and Touch I

This course covers theory in stress physiology stress management, techniques of progressive relaxation, mental rehearsal, imagery training. Included are stress management strategies for coping with stress-related disorders with emphasis on relationships to physical activities. It explores the relationship between health and creative ways of living through understanding human nature and human potential. Students will cover the evolution and dynamics of human biology, consciousness and culture, recognition and use of socio-psychological and ecological factors in the health and healing process.

Holistic Principles and Touch II

This course covers practical applications in stress physiology stress management, techniques of progressive relaxation, mental rehearsal, imagery training. Included are stress management strategies for coping with stress-related disorders with emphasis on relationships to physical activities.

Professional Standards, Ethics and Business Practices, and Career Development

This course covers professional ethics which are crucial factors in a student's success as a therapist and to the profession as a whole. The students will study ethical business practices, and explore ethics issues for massage therapists which will better prepare students to manage ethical issues as they arise. It provides detailed information on establishing, marketing and maintaining a private practice. The information will be applicable to whatever type of practice the student desires.

Externship

This course will provide the student with an opportunity to use the skills acquired from classroom instruction in a "real life" medical setting. Students will be placed with a medical facility as an extern where the staff will provide opportunities for practical application of the student's skills in a back-office clinical environment.

HVAC/R LEVEL I ADVANCED

The content of the program provides the student with specialized training in refrigeration and air conditioning. Topics covered include basic physics and major system components, including hermetic, semi-hermetic, and open compressors, as well as condensers, evaporators, and refrigerant-metering devices. It also covers advanced concepts of electricity and magnetism as they pertain to resistors, conductors, power supplies, circuit protection devices, and transformers.

SCHEDULE

5 Classroom Weeks - 16 hours per week

**Monday through Thursday
4 hours per day**

80 Clock Hours

<u>Courses</u>	<u>Clock Hours</u>
Physics, Electricity and Magnetism	6
Component Functions	6
Advanced Gas Laws	6
Pressure/Temperature Relationship	7
Compression Refrigeration Cycle	6
Refrigerants, Oil	6
Recycling, Safe Practices and Public Relations	7
Compressors	6
Condensers	6
Evaporators	6
Capillary Tubes	6
Valves	6
Resistors, Conductors, Power Supplies, Circuit Protection	6
Total	80 Clock Hours

Physics, Electricity and Magnetism

Advanced principles of electricity required by HVAC technicians including proper use of test equipment, A/C and D/C circuits, and component theory and operation. This course provides foundation to support understanding how to troubleshoot heating, air conditioning and refrigeration equipment. Students will delve into the principles of electricity, electrical current, circuitry, and A/C devices; apply Ohm's law to electrical calculations; and perform electrical tests.

Component Functions

A study of components, applications, and installation of mechanical air conditioning systems including operating conditions, troubleshooting, repair, and charging of air conditioning systems. Students will demonstrate systems applications; implement and demonstrate industry accepted refrigerant charging procedures; demonstrate air conditioning system installation procedures; and demonstrate component and part diagnostics and replacement.

Advanced Gas Laws

Study of the procedures and principles used in servicing heating systems including gas fired furnaces and electric heating systems. Students will learn how to identify different types of gas furnaces; identify and discuss component operation of gas furnaces; service and troubleshoot gas furnaces; perform safety inspections on gas and electric heating systems; identify unsafe operation of gas furnaces; identify and discuss component operation of electric heating systems; and service and troubleshoot electric heating systems.

Pressure/Temperature Relationship

Study of the refrigeration cycle, heat transfer theory, temperature/pressure relationship, refrigerant handling, refrigeration components and safety. Student will learn how to identify refrigeration components; explain operation of the basic refrigeration cycle and heat transfer; demonstrate proper application and/or use of tools, test equipment, and safety procedures.

Compression Refrigeration Cycle

Study of the vapor compression cycle, multistage compression cycles, and cascaded systems. Understanding of how each component within the compression refrigeration cycle operates.

Refrigerants, Oil

Study of the characteristics and applications of various refrigerants and their associated refrigerant oils.

Recycling, Safe Practices and Public Relations

Study of HVAC refrigerant recovery and recycling. Review of safe practices and EPA guidelines for refrigerant recovery and recycling during the installation, service, and repair of all HVAC and refrigeration systems. Students will define refrigerant recovery, recycle, and reclaim terms; explain refrigerant recovery, recycle, and reclaim procedures; analyze refrigerant recovery, recycle, and reclaim operations; identify Type I, Type II, and Type III appliances; examine and utilize Section 608 of the Clean Air Act of 1990 Refrigerant, Recycle, and Reclaim to determine compliance.

Compressors

Study of the performance of refrigeration compressors (heat rate, electrical power requirement, mass flow) and the correct compressor performance for changes in operating pressures, temperatures, and control methods.

Condensers

Study of condenser fan curve operating point, determining the condenser duty, superheat and subcooling. Students will understand the Condenser performance curve and air flow requirements.

Evaporators

Application of non-psychometric formulas to analyze the airside performance of the evaporator heat exchangers.

Capillary Tubes

Study of the Hand expansion valve and capillary tubes. Students will learn how to remove and replace the capillary tubes.

Valves

Study and application of the reversing valve operation and the operation of different gas valves.

Resistors, Conductors, Power Supplies, Circuit Protection

Study of how electrical power is transmitted, resistors, conductors, circuit protection devices, transformers, overcurrent, and ground fault interrupters.

HVAC/R LEVEL II ADVANCED

The content of the program provides the student with specialized training in the tools of the trade, refrigeration system accessories, desiccants and driers, defrosting methods, refrigeration system controls, and piping. It also includes instruction on compressor replacement and system evacuation, electric motors in refrigeration systems, motor capacitors and protectors, thermostats, relays, contactors and starters, test equipment and troubleshooting, pressure and enthalpy diagrams, psychometrics, heat transfer estimating heat loads, residential air conditioning, humidification and a review of safety codes.

SCHEDULE

5 Classroom Weeks - 16 hours per week

**Monday through Thursday
4 hours per day**

80 Clock Hours

Courses	Clock Hours
Trade Tools	5
Refrigeration Systems	5
Desiccants, Driers	5
Defrosting Methods	5
Piping	5
Retrofits and Disposal	5
Compressor Replacement, System Evacuation	5
Motors, Capacitors, Protectors, Thermostats, Relays, Connectors, Starters	5
Test Equipment and Troubleshooting	5
Pressure and Enthalpy Diagrams	5
Moisture, Cooling Loads	5
Psychometrics	5
Heat Transfer and Heat Loads	5
Room Air Conditioners, Residential Air Conditioners	5
Humidification	5
Safety Codes	5
Total	80 Clock Hours

Trade Tools

Study of site preparation, foundation, form work, framing and trade tools used in the HVAC/R industry.

Refrigeration Systems

Theory of and practical application in the maintenance of commercial refrigeration; medium and low temperature applications and ice machines.

Desiccants, Driers

Study of desiccant dehumidification and driers in lowering dew-point settings and increasing cooling coil capacity. Applications of setting chilled water temperature saving energy.

Defrosting Methods

Study of complex and detailed methods of defrosting systems, defrost controls and operating sequences.

Piping

Students learn to design a HVAC piping system, using fittings and tools for steel (black), copper, plastic, PVC, and ferrous metal pipes.

Retrofits and Disposal

Study of retrofitting and disposing air conditioning systems and an introduction to part labels and retrofit considerations.

Compressor Replacement, System Evacuation

Study of various systems where students solve typical service problems. Compressors are replaced, systems are evacuated and dehydrated, and systems tested and adjusted.

Motors, Capacitors, Protectors, Thermostats, Relays, Connectors, Starters

This course addresses the functions and maintenance of electrical motors, motor control components of an HVAC system, capacitors, protectors, thermostats, relays, connectors, and starters.

Test Equipment and Troubleshooting

This course is designed to teach students advanced skills using test equipment in troubleshooting HVAC/R systems.

Pressure and Enthalpy Diagrams

Students learn how to identify and understand pressure and enthalpy diagrams.

Moisture, Cooling Loads

Study of how to calculate moisture and cooling loads for various types of commercial structures.

Psychometrics

Study of Air Conditioning psychometrics in determining volume flow of air to be pushed into the ducting system.

Heat Transfer and Heat Loads

Theoretical and hands-on study of heat transfer and heat loads.

Room Air Conditioners, Residential Air Conditioners

This course addresses residential air conditioning systems. Emphasis is placed on the diversity of refrigeration systems and how they operate. Air comfort, distribution, and balance are discussed. The course focuses on the installation, operation, and troubleshooting of air conditioning system components and controls.

Humidification

Study of humidification, dehumidification, cleaning equipment and systems as applied to commercial buildings. Human comfort requirements, indoor air quality, air conditioning loads, equipment maintenance schedules and energy conservation will be studied. Emphasis will be on maintaining a comfortable, healthy environment, economically and efficiently with well-maintained equipment

Safety Codes

Continuing instruction in safety requirements and demonstration of sound safety practices. Students will demonstrate their ability to use code books and apply safety code in their hands-on work.

HVAC/R LEVEL III ADVANCED

The content of the program provides the student with specialized training in heat pump theory, including water source heat pumps. Topics covered include computer-room environmental control, economizers, fans and blowers, air filtration and distribution evaporative condensers and cooling towers, water treatment, multiple-rack systems, hydronics, troubleshooting, controls and controls components, pneumatic relays, typical control applications, and control maintenance.

SCHEDULE

5 Classroom Weeks - 16 hours per week

**Monday through Thursday
4 hours per day**

80 Clock Hours

<u>Courses</u>	<u>Clock Hours</u>
Pump Theory, Heat Pumps	5
Computer Room Environmental Control	6
Economizer Systems	5
Fans, Blowers, Air Filters, Electrostatic Cleaning	5
Air Distribution	6
Evaporative Condensers, Cooling Towers	6
Air-Cooled Condensing Unit Room Requirements	5
Heat Transfer Coils	5
Multiple Rack Systems	6
Hydronics	5
Control Theory, Controls Components and Systems, Control Applications and Maintenance	6
Sensors	5
Air Supply Equipment	5
Thermostats and Controllers	5
Pneumatic Relays	5
Total	80 Clock Hours

Pump Theory, Heat Pumps

This course covers the theoretical principles of air source and water source heat pumps. Emphasis is placed on safety, modes of operation, defrost systems, refrigerant charging, and system performance.

Computer Room Environmental Control

Operational theory and compatibility of controls to specific systems are the course's main concentration. Both electric and computer controls are integrated into single and multi-zone air-handling systems.

Economizer Systems

Study of air-side economizer systems to save energy in buildings by using cool outside air as a means of cooling the indoor space.

Fans, Blowers, Air Filters, Electrostatic Cleaning

The course emphasizes combination heating and cooling systems and the role of fans, blowers, air filters, and electrostatic cleaning.

Air Distribution

Study of the design, installation, balancing, and selection of components for air distribution systems. Lab work includes planning, layout, and fabrication of duct work.

Evaporative Condensers, Cooling Towers

This course covers the design intent and construction of evaporative condensers and cooling towers as applied to the HVAC/R industry. Other topics covered will be service and maintenance procedures for evaporative condensers and cooling towers.

Air-Cooled Condensing Unit Room Requirements

Study of the requirements for equipment and associated accessories for clean HVAC systems, clean room equipment, chillers, cold rooms, clean room panels, cold room panels, cooling coils, HVAC condensing unit, HEPA air filters, dispensing booth and clean HVAC systems.

Heat Transfer Coils

Study of the calculation of cooling loads for various types of commercial structures. Emphasis is placed on the determination, with instruments, of the performance characteristics of cooling coils, heating coils, a water chiller, and cooling tower.

Multiple Rack Systems

Study of multiple rack systems for large duct areas to provide maximum coverage throughout the complete dimensional area of the duct. S

Hydronics

Technical study in the installation and servicing of Hydronic Systems.

Control Theory, Controls Components and Systems, Control Applications and Maintenance

Study of control theory, controls components and systems, control applications and maintenance as it pertains to both commercial and residential HVAC systems. HVAC controlling units from circuit breakers to thermostats are reviewed. Both theory and application are covered for all controls.

Maintenance

This course presents the methods of evacuating, recharging, recovering and disposing of refrigerants; the various types of tubing and piping in HVAC systems; and the proper methods of configuring and connecting pipes or tubing. HVAC system calibration instruments are discussed and used. This course also continues the study of mathematics needed to analyze and maintain HVAC systems.

Sensors

Study of the theory, operation and wiring of industrial control sensors and their applications.

Air Supply Equipment

Study air handling units and equipment, heating equipment, cooling equipment, air supply systems, temperature controls and their heating, ventilating and cooling applications.

Thermostats and Controllers

Study of thermostat and controllers operation and calibration.

Pneumatic Relays

Students will learn the pneumatic control systems and relays used on commercial HVAC systems and functions of various pneumatic controls and relays.

HEAT PUMP TRAINING ADVANCED

The content of the program provides the student with specialized training in heat pump fundamentals, components, applications, installation, and service. Heat gain and heat loss calculations based on ACCA’s Manual J are included, as are troubleshooting techniques for both the electrical and refrigeration systems. Various heat pump systems—both packaged systems and split systems—are studied, including air-to-air heat pumps, water-source heat pumps, and various kinds of special-purpose heat pumps, such as high-efficiency and multi-capacity units. The use of supplemental and auxiliary heat is covered in depth. The course also delves into servicing heat pumps in both the heating and cooling cycles.

SCHEDULE

8 Classroom Weeks - 16 hours per week

**Monday through Thursday
4 hours per day**

130 Clock Hours

Courses	Clock Hours
Heat Pump Fundamentals, Systems, Principles, Compressors, Electrical Systems	8
Flows Controls and Accessories	6
Air-to-Air Heat Pump Defrost	6
Supplemental Electric Heat	6
Fossil Fuel Backup Heat	6
Water-Source Heat Pump Systems	6
Installing/Serviceing Water-Source Heat Pumps	8
Heat Pump Installation	6
Heat Pump Piping	6
Electrical Troubleshooting	6
Refrigerant-Side Troubleshooting	6
Troubleshooting Refrigerant Circuit Components	8
Troubleshooting Water-Source Heat Pumps	10
High Efficiency Air-to-Air Heat Pumps	6
Water Source Heat Pumps for Special Applications	6
Heat Load	6
Indoor Air Distribution	6
Duct Design	6
Diagnosing Air Flow Problems	6
Customer Relations	6

Total

130 Clock Hours

Heat Pump Fundamentals, Systems, Principles, Compressors, Electrical Systems and Components, Thermostats

Study of the refrigeration cycle in air comfort conditioning including heat pump fundamentals, systems, principles, compressors, electrical systems and components, thermostats, electrical schematics, maintenance, geothermal heat pumps, and troubleshooting case studies.

Flows Controls and Accessories

Study of flows controls and accessories in a duct system. Emphasis is placed on static pressure, velocity pressure, total pressure, dynamic losses, and friction losses.

Air-to-Air Heat Pump Defrost

Study of the heat pump system as it relates to air-to-air heat pump defrost, supplementary heat, defrost control, and heat pump servicing.

Supplemental Electric Heat

Study of wiring diagrams, methods, and troubleshooting supplemental electric heat systems. Electrical concepts include: standing pilot furnaces, heating/air conditioning circuits, troubleshooting strategies, testing and replacing common devices, repair strategies, motor applications, power wiring, testing and replacing motors and start relays.

Fossil Fuel Backup Heat

This course will focus on basic heat transfer theory and concepts as it pertains to fossil fuel backup heat. Specific areas of study include the fossil fuel systems (natural gas, propane and fuel oil). Residential and commercial system applications will be addressed.

Water-Source Heat Pump Systems

This course covers the principles of water source heat pumps. Emphasis is placed on safety, modes of operation; defrost systems, refrigerant charging, and system performance.

Installing/Serviceing Water-Source Heat Pumps

This course covers water-cooled comfort systems, water-source/geothermal heat pumps, and high efficiency heat pump systems including variable speed drives and controls. Emphasis is placed on the application, installation, and servicing of water-source systems and the mechanical and electronic control components of advanced comfort systems.

Heat Pump Installation

Advanced techniques are introduced for the installation of heat pump systems.

Heat Pump Piping

This course centers around the skills needed to design a heat pump piping system. Students will learn how initial decisions, load estimates and equipment selection are impacted when heat pump piping systems are used. The course covers various piping systems, the selection of chillers, pumps, cooling towers, and control valves.

Electrical Troubleshooting

Study of troubleshooting techniques for AC and DC circuits, electrical test equipment, and installation of electrical components.

Refrigerant-Side Troubleshooting

Study of troubleshooting techniques of refrigerant side parameters.

Troubleshooting Refrigerant Circuit Components

Study of refrigerant circuit components and troubleshooting problems with the compressor, rates of flow and pressure of refrigerants within the circuit.

Troubleshooting Water-Source Heat Pumps

Study of the heat pump system as it relates to water-source heat pump defrost, supplementary heat, defrost control, and heat pump servicing. Emphasis is placed on troubleshooting techniques.

High Efficiency Air-to-Air Heat Pumps

Study of the heat pump system as it relates to air-to-air heat pump defrost, supplementary heat, defrost control, and heat pump servicing.

Water Source Heat Pumps for Special Applications

This course covers the theoretical and practical principles of water source heat pumps for commercial buildings.

Heat Load

This course trains students to calculate heat loss/gains due to infiltration and sun loads. Students will learn how to price energy upgrades such as insulation and window improvements and to calculate payback and fuel savings.

Indoor Air Distribution

Study of properly managing HVAC electrical controls and air distribution systems. Students will learn how to manage controls and how to use fundamental air distribution principles for achieving consistent HVAC comfort and efficiency in buildings, plants and facilities.

Duct Design

This course covers the techniques used to layout and fabricate duct work commonly found in HVAC systems. Emphasis is placed on the skills required to fabricate duct work.

Diagnosing Air Flow Problems

Study of how to diagnose air flow problems utilizing testing, adjusting, and balancing techniques. Students will learn equations and calculations for system balancing to adjust the total system, perform accurate measurements, establish quantitative performance of all equipment, and verify automatic controls.

Customer Relations

Studies of the strategies and techniques required to provide excellent customer service. Professional problem resolutions to various HVAC situations will be reviewed.

HEAT TRAINING ADVANCED

The content of the program provides the student with specialized training in heating. Heating Fundamentals include a study of heat loss from structures, a review of the fundamentals of heat load calculations, ducted warm air systems, duct sizing and layout, air filtration, humidification, a fundamental approach to control systems, customer relations, and a review of safety and codes. Electric Heating includes a study of resistance heating, heat pumps, radiant heating systems, electric duct heaters and furnaces, baseboard and unit heaters, radiant heat installation, electric heating control devices, electric furnaces, multistep controllers, electronic sequencing controls, decentralized electric heating systems, and electric boilers. Gas Heating includes a study of combustion chemistry, heating fuels, burners and accessories, burner types and components (including natural gas-burning and LP gas-burning equipment), start-up and combustion efficiency testing, gas burner controls, ignition systems for infrared heaters, gas heating equipment maintenance, troubleshooting, and condensing furnaces. Oil Heating includes a study of the origin, refining process, and burning characteristics of fuel oil. In addition, equipment application parameters, burner and accessories, fuel characteristics, oil burners, tanks and piping ignition systems, oil burner controls, troubleshooting, and industrial flame safeguard controls are discussed in detail. Hot Water Heating includes a study of hot water boilers and controls, heat transfer units, centrifugal pumps, air controls, hot water specialties, piping methods, pressure drop calculations, zoning, primary/secondary pumping, radiant heating systems, temperature controls, troubleshooting system components, and analysis of system problems. Steam Heating includes a study of two-pipe heating systems, steam traps, steam specialties, steam piping practices, converters and instantaneous heaters, steam heat system controls, unit heaters and convectors, boilers, boiler start-up and operation, boiler installation, troubleshooting, and troubleshooting temperature and pressure regulators.

SCHEDULE

14 Classroom Weeks - 16 hours per week

**Monday through Thursday
4 hours per day**

220 Clock Hours

Courses	Clock Hours
Heating	37
Electric Heating	37
Gas Heating	37
Oil Heating	37
Hot Water Heating	36
Steam Heating	36
Total	220 Clock Hours

Heating

Advanced study in heating systems including: heat flow, heat loss, heat load, ducted warm air systems/room air distribution, duct sizing and layout, air filtration, humidification, control systems, and safety and codes. Emphasis is placed on installation, wiring, and troubleshooting for different HVAC systems. Students will learn how to choose the correct system for specific space, climate, and needs; compare the economy and efficiency of various fuel types; install, maintain, and troubleshoot conversion units; and calculate formula cross references and data tables with conversions.

Electric Heating

Advanced study in electric heating systems including: heating with electricity, resistance heating, heat pumps, radiant heating systems, duct heaters and furnaces, baseboard and unit heaters, radiant heat installation, electric furnaces, duct heaters, multi-step controllers, electronic sequencing controls, decentralized electric heating systems, and electric boilers.

Gas Heating

Advanced study in central gas heating systems including: combustion chemistry, gas burners; burners: types, components, function, gas burners: equipment location and piping for natural and manufactured gas, gas burners: gas installation procedures, start-up and combustion efficiency testing, combination gas controls, ignition systems for infrared heaters, gas heating equipment maintenance and troubleshooting, and condensing furnaces. This course also details the significant advances made in the gas heating industry.

Oil Heating

Advanced study in oil heating systems including: fuel oils: origin, refining process, burning characteristics, equipment application parameters, burners and accessories, fuel characteristics, fuel/burner relationship, and burners, burners: capacity selection and combustion chamber installation, tanks and piping: fuel units and ignition systems, oil burners: controls, start-up, and combustion efficiency, oil burner controls, troubleshooting: primary controls, components, systems, and industrial flame safeguard controls. This course incorporates the latest technological advancements in the oil heating industry.

Hot Water Heating

Advanced study in hot water heating systems including: hot water boilers, controls, heat transfer units, centrifugal pumps, air control, hot water specialties, piping methods, zoning, primary/secondary pumping, hydronic radiant heating systems, temperature controls, and troubleshooting: components, hydronic systems.

Steam Heating

Advanced study in steam heating systems including: basic steam and one-pipe heating systems, two-pipe steam heating systems, steam: traps, specialties, piping practices, converters and instantaneous heaters, steam heat system controls, unit heaters and convectors, boilers: startup, operation, installation, troubleshooting temperature and pressure regulators. This course includes the design, layout, installation, operation, industry standards and maintenance and repair of residential and commercial steam systems.

REFRIGERATION AND AIR CONDITIONING ADVANCED

The content of the program provides the student with specialized training in refrigeration and air conditioning.

Principles of Refrigeration includes a study of physics, major component functions, gas laws, and pressure/temperature relationship are also introduced to assist in the understanding of the compression refrigeration cycle. *Compressors, Condensers, and Cooling Towers* includes a study of reciprocating, rotary, screw, centrifugal, and scroll compressors, as well as other classifications of compressors (open, semi-hermetic, and hermetic). Air-cooled condensers, water-cooled condensers, evaporative condensers and cooling towers, and water treatment are also covered.

Evaporators and System Components includes a study of refrigerant evaporators, metering devices, refrigeration system controls, refrigerant tables, refrigerant properties and characteristics, and refrigerant designations. Evaporator types include gravity coils, brine units, cold plate, shell-and-tube evaporators and blower evaporators. Refrigerant controls include pressure controls, temperature controls, differential controls, thermostat expansion valves, evaporator pressure regulators, suction pressure regulators, solenoid valves, and reversing valves.

Tools, Controls, and Troubleshooting includes a study of the proper use of trade tools associated with refrigeration and air conditioning, including tube benders and cutters, ratchet wrenches, flaring tools, pinch-off and swaging tools, voltage testers, vacuum pumps and vacuum gauges, and charging cylinders. It also provides comprehensive instruction on servicing electric motors, capacitors, motor protectors, and direct digital controls (DDC). Troubleshooting is emphasized as are proper procedures for replacing compressors and evacuating systems.

Air Conditioning Principles includes a study of residential air conditioning systems, basic heat pump theory, water-source heat pumps, computer room environmental control, and economizer systems are explored. Psychrometrics and the proper steps for calculating cooling loads for residential structures are also explained. *Heat Transfer and Distribution* includes a study of radiation, conduction, and convection, along with estimating heat loads for residential structures and the principles of air distribution, fans and blowers and instruction on fan laws, fan classifications, centrifugal fans, and fan efficiency.

SCHEDULE

14 Classroom Weeks - 16 hours per week

**Monday through Thursday
4 hours per day**

220 Clock Hours

Courses	Clock Hours
Refrigeration	37
Compressors, Condensers, Cooling Towers	37
Evaporator and System Components	37
Tools, Controls, Troubleshooting	37
Air Conditioning	36
Heat Transfer and Distribution	36
Total	220 Clock Hours

Refrigeration

Advanced study in refrigeration systems including: physics, gas laws, the pressure/temperature relationship, compression refrigeration cycle, and using pressure and enthalpy diagrams.

Compressors, Condensers, Cooling Towers

Advanced study in the role of compressors, condensers, and cooling towers in HVAC/R systems including: compressors: open-type, hermetic, semi-hermetic; refrigeration system accessories; desiccants and driers; condensers: air-cooled, water-cooled; evaporative condensers and cooling towers; water treatment; closed circuit water coolers; air-cooled condensing unit room requirements; heat transfer coils; and multiple rack systems.

Evaporator and System Components

Advanced study in the role of evaporators and system components in HVAC/R systems including: refrigeration evaporators, defrosting methods, capillary tubes, thermostatic expansion valves, refrigeration system controls, refrigerants: tables, properties, characteristics, designations, oil in refrigeration systems: recover, recycle, reclaim, safe handling of refrigerants and cylinders, refrigeration system piping, and retrofits and disposal requirements.

Tools, Controls, Troubleshooting

Advanced study in the role of tools, controls, and troubleshooting in HVAC/R systems including: trade tools, motor capacitors and protectors, low voltage thermostats, pneumatic controls, direct digital controls, and compressor replacement and system evacuation.

Air Conditioning

Advanced study in air conditioning systems including: moisture, calculating cooling loads, room air conditioners, air conditioning systems, residential air conditioning, heat pump theory, water-source heat pumps, psychometrics, computer room environmental control, and economizer systems.

Heat Transfer and Distribution

Advanced study in heat transfer and distribution including: heat transfer coils, heat load, fan and blowers, air filters and electrostatic cleaning, air distribution, and hydronics, controllers, adapters, indicators.

ELECTRICITY ADVANCED

The content of the program provides the student with specialized training in electricity. Topics covered include electricity in HVAC systems, electrical components, basic electronics, troubleshooting components, and troubleshooting residential equipment.

SCHEDULE

12 Classroom Weeks - 16 hours per week

**Monday through Thursday
4 hours per day**

190 Clock Hours

<u>Courses</u>	<u>Clock Hours</u>
Electrical Components	38
Electricity	38
Electronics	38
Troubleshooting Components	38
Troubleshooting Components	38
Total	190 Clock Hours

Electricity

Advanced study in the role of electricity in the HVAC/R industry including: electricity and magnetism, voltage, direct and alternating current, series and parallel circuits, electrical symbols and schematic diagrams, and electrical safety.

Electrical Components

Advanced study in electrical components in HVAC/R systems including: resistors and resistance, capacitors and capacitance, inductors and inductances, transformers, relays and contactors, motors, circuit protection devices, conductors, power supplies, and basic controls.

Electronics

Advanced study in electronics in HVAC/R systems including: solid state electronics, diodes and power supplies, power supply regulation and filtration, transistors, silicon-controlled rectifiers, triacs, diacs, and solid state relays, Peltier diodes, protective devices, number systems, logic circuits, digital integrated circuits, analog integrated circuits, microprocessors and computers.

Troubleshooting Components

Advanced study in troubleshooting components in HVAC/R systems including: test equipment, resistors, capacitors, relays, contactors, starters, transformers, thermostats, motors, hermetic and semi-hermetic components, and wiring systems.

Troubleshooting Residential and Commercial Equipment

Advanced study in troubleshooting residential and commercial HVAC/R equipment including: reading and understanding schematics, split systems, furnaces: gas, oil, electric, heat pumps: air-to-air, water-source, electronic air cleaners, and humidifiers.

CONTROLS TRAINING ADVANCED

The content of the program provides the student with specialized training in controls training. Topics covered include fundamentals of controls, pneumatic controls, electromechanical controls, basic electronics for controls, and electronic proportional controls.

SCHEDULE

12 Classroom Weeks - 16 hours per week

**Monday through Thursday
4 hours per day**

190 Clock Hours

<u>Courses</u>	<u>Clock Hours</u>
Controls	38
Controls Electronics	38
Electromechanical Controls	38
Electronic Proportional Controls	38
Pneumatic Controls	38
Total	190 Clock Hours

Controls

Advanced study in controls in HVAC/R systems including: mechanical controls, control: components, variables, terminology, systems, specification, operation sequencing, electrical safety, and sensors, valves, dampers.

Pneumatic Controls

Advanced study in pneumatic controls in HVAC/R systems including: control theory, air supply equipment, thermostats and controllers, transmitter-receiver controller equipment, pneumatic relays, valve and damper actuators, system applications, and control system maintenance.

Electromechanical Controls

Advanced study in electromechanical controls in HVAC/R systems including: electrical safety, Ohm's law, relays, transformers, capacitors, electromechanical test instruments, electrical symbols and schematic diagrams, circuit protection devices, power supplies, and modulating controls.

Controls Electronics

Advanced study in controls electronics in HVAC/R systems including: solid state electronics, diodes, power supplies, power supply regulation and filtration, transistors, silicon-controlled rectifiers, triacs, diacs, solid state relays, Peltier diodes, protective devices, number systems, logic circuits, circuits: digital integrated, analog integrated, and microprocessors and computers.

Electronic Proportional Controls

Advanced study in electronic proportional controls in HVAC/R systems including: electronic controls, diodes, power supplies, power supply regulation and filtration, silicon-controlled rectifiers, triacs, diacs, solid state relays, protective devices, measuring circuits, installation and wiring techniques, AC power and grounding practices, and electronic controllers, adapters, indicators.

HEATING, VENTILATION AND AIR CONDITIONING (ASSOCIATE OF APPLIED SCIENCE)

Students in this program will acquire the skills necessary to identify, locate and solve heating, ventilating, air conditioning and refrigeration problems in all types of buildings from residential to commercial. Students will apply theory and principles learned in the class and lab settings that will help them to develop, select, operate and test heating, ventilating and air conditioning equipment. The program emphasizes theory, as well as hands-on practice. In addition the program provides skills in critical thinking, computation and communication.

SCHEDULE

36 Classroom Weeks - 16 hours per week	Monday through Thursday 4 hours per day
4 Weeks of Externship	Monday through Friday hours to be arranged
25 Classroom Weeks - 20 hours per week	Monday through Thursday 5 hours per day
65 Total Weeks	
1,220 Clock Hours/66 Academic Semester Credit Hours/32 Financial Aid Credit Hours	

<u>Courses</u>	<u>Clock Hours</u>	<u>Academic Semester Credit Hours</u>
Air Distribution, Venting, Maintenance, and Air Conditioning	60	3 1/2
Electronics and Control Circuit Troubleshooting	60	3 1/2
Electric Heat, Accessories, Metering, and Compressors	60	3 1/2
Heat Pumps and Handling Refrigerants	60	3 1/2
Maintenance and Troubleshooting	60	3
Hydronic, Airside and Balancing Systems	60	3 1/2
Troubleshooting Systems and Indoor Qualify Systems	60	3 1/2
Refrigeration	60	3 1/2
Codes & Licenses, Energy, Water Treatment, and Building Mgmt.	60	4
Green HVAC Technologies	60	3 1/2
Advanced HVAC Regulations and Standards	60	3 1/2
Advanced Troubleshooting, Heat Pumps, and Refrigeration	60	3 1/2
Externship	180	4
U.S. History and Government	80	5
Psychology	80	5
Earth Science	80	5
Algebra	80	5
Total	1,220 Clock Hours	66 Sem. Cr. Hours

Air Distribution/Venting/Maintenance/Air Conditioning

This course covers the fundamentals of air distribution systems used in air conditioning. The student is given instruction in the fundamentals and principles of human comfort, psychometrics, heat transfer and how to calculate heating and cooling loads. The course also covers fan fundamentals, types of distribution systems, heating and cooling apparatus, and the controls of system operations.

Topics include air conditioning and heat pump technology covering commercial and residential air conditioning and the characteristics and operation of heat pump systems. The electrical and mechanical systems will be studied and analyzed. Students will study the procedures for the installation, maintenance, troubleshooting and repair of dehumidifiers, room air conditioners, and split systems. Instruction will be given on air conditioning and heat pump controls and diagnostic procedures.

Electronics/Control Circuit Troubleshooting

Study of AC and DC circuits, the use of electrical meters, reading electrical diagrams, electrical distribution systems in residential and commercial buildings and the installation of electrical equipment. Sections of the National Electrical Code are also studied. Provides the foundational knowledge and skills to understand and safely install, service, and troubleshoot HVAC/R electrical circuits and electronics. Topics include basic electrical theories, HVAC/R electricity and electronic symbols and schematics, proper meter usage, motors, controls, and other electrical/electronic devices. The sequence of operation and diagnostic troubleshooting, utilizing pictorial, schematic, and hands-on approaches are also stressed.

Electric Heat/Accessories/Metering/Compressors

This course will cover the necessary skills to be able to maintain, troubleshoot and install electrical heat. It will cover the many differing applications of electric heat and will allow for the learner to become confident in the service and installation of electric heat appliances. The components and controls of electric heat will be covered in detail as to allow the learner to think sequentially in the processes required for troubleshooting electric heat sources. Safety in electricity will be covered extensively.

Heat Pumps/Handling Refrigerants

Upon successful completion of this course, the student should be able to identify the function of all components and accessories of all electric and dual heat pump systems. Topics will include electric heat and heat pump fundamentals, principles and applications; refrigerant flow controls; defrost cycle controls; heat pump thermostats; indoor air distribution; dual fuel controls; and change-over stats. Emphasis will be on the electrical diagrams and mechanical principles of operation. These systems, as well as practical instruction in service and diagram procedures and techniques for the efficient operation, maintenance, troubleshooting and repair of these systems, will make up the lab portion of the course.

Maintenance and Troubleshooting

Upon successful completion of this course, the student will be able to identify techniques and procedures used in the residential construction industry to determine proper sizing of HVAC equipment and ducts to meet the requirements for a high-quality, comfortable climate in terms of heating, cooling, humidifying, dehumidifying, ventilation and air cleaning or filtering.

Hydronic/Airside/Balancing Systems

This course provides the theory and practice in fluid measuring methods and instrumentation. Emphasis is placed on working with instruments such as pitot tube devices and velometers to illustrate the interaction of fluid systems curves. Course content also includes air psychometries, air and hydronic system balancing and measurement of sound.

Troubleshooting Systems/Indoor Air Quality Systems

This course introduces the techniques of assessing and maintaining the quality of the indoor environment in residential and commercial structures. Topics include handling and investigating complaints, filter selection, humidity control, testing for sources of carbon monoxide, impact of

mechanical ventilation, and building and duct pressures. Upon completion, students should be able to assist in investigating and solving common indoor air quality problems.

Refrigeration

An introduction to the refrigeration cycle, basic thermodynamics, heat transfer, temperature/pressure relationship, safety, refrigeration containment, and refrigeration components.

Codes and Licenses/Energy/Water Treatment/Building Management

HVAC theories and concepts with special emphasis on the understanding and documentation of the codes and regulations required for the State of California. This course specifies cleaning and treatment of circulating HVAC water systems, including cleaning compounds, chemical treatment for closed loop heat transfer systems, chemical treatment for open loop systems, and glycol-water heat transfer systems.

Green HVAC Technologies

This course covers the fundamentals of green HVAC technologies, following rules and regulations that are healthful to building occupants, energy efficient, reduce environmental pollution and global warming, and reduce long-term costs.

Topics include energy audits, energy-saving equipment and systems, green HVAC system design, installation, and servicing. Students will study the differences in green air quality considerations, refrigerant handling, hazardous chemical handling, and the financial and environmental incentives for green HVAC systems.

Advanced HVAC Regulations and Standards

This course covers the changes in California Code of Regulations Title 24, Section 11. Students will learn the skills needed to take existing HVAC systems to comply with California Code of Regulations Title 24, Section 11. Students will learn how to take existing HVAC systems and reconfigure them to reduce 20% in water usage and recycle 50% of construction waste. Students will study the new law requiring the inspection of all heating, air conditioning and other mechanical systems in all non-residential buildings over 10,000 square feet, to make sure they are performing to expected levels the fundamentals of green HVAC technologies.

Advanced Troubleshooting, Heat Pumps, and Refrigeration

This course focuses on advanced techniques in assessing and maintaining the quality of the indoor environment in residential and commercial structures. Students will study advanced techniques in repairing electric heat and heat pumps and refrigeration.

Externship

This course will provide the student with an opportunity to use the skills acquired from classroom instruction in a "real life" setting. Students will be placed with an HVAC department within an outside business as an extern where the staff will provide opportunities for practical application of the student's skills.

U.S. History and Government

This course is devoted to the study of United States history from 1900 through 1945 and a study of the basic principles of the American system of government. Major political, economic, social and global events will be emphasized within a chronological context. Special emphasis will be given to the Constitution, its application and the American judicial system. Throughout the course students will be encouraged to analyze issues, think critically, explain perspectives and participate collaboratively in the learning process.

Psychology

Introduction to Psychology introduces the field of psychology and its basic concepts, theories, research methods, and contributions to the understanding of human behavior. Topics include the nervous system, perception, motivation, learning and memory, social behavior, personality, developmental, and clinical psychology. The past and current theories and contributions of major psychologists are explored.

Earth Science

The study of Earth Science focuses on the Earth's materials, changes of the surface and interior, and the forces that cause these changes. Changes are interpreted within the context of plate tectonics, the unifying scientific principle of all of the physical Earth sciences. Earth Science also examines the interaction between Earth's weather and climate, the changes of organisms through time (paleontology) as interpreted by organic evolution. Finally, a major division of Earth Science is astronomy, the study of our solar system, galaxies, the universe, and deep time.

Algebra

College Math/Algebra is the foundation for college mathematics courses. It is the bridge from the concrete to the abstract study of mathematics. Topics include simplifying expressions, evaluating and solving equations.

STUDENT POLICIES AND SERVICES

Student Orientation

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

Hours

Instruction Hours:	8:30 a.m. to 12:30 pm or 1:00 to 5:00 p.m., Monday through Thursday 6:00 a.m. to 10:00 a.m., 10:00 a.m. to 2:00 p.m., 2:00 p.m. to 6:00 p.m. Monday through Thursday (HVAC only) 6:00 p.m. to 10:00 p.m., Monday through Thursday
Office Hours:	8:00 a.m. to 5:00 p.m., Monday through Friday 5:30 p.m. to 10:00 p.m., Monday through Thursday by appointment

Classes are offered continually on a cyclical basis, usually starting on selected Mondays. Legal holidays are observed. The school closes for vacation one week during the Christmas holiday season. The school provides special consideration for holidays of all religious beliefs. Appropriate arrangements can be made with the school director. A complete listing on module starts, holidays, etc. will be 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. In order to prepare for these requirements, the following procedures must be followed:

- 1) Smoking is prohibited in the classrooms and restrooms. Smoking will be permitted outside on the ground floor.
- 2) Students must maintain a clean, organized, workstation at all times. When leaving the area, all electrical, including computers, must be turned off.
- 3) Food and drinks are prohibited in the classrooms.
- 4) Students misusing the equipment and instrumental devices may be subject to dismissal and may be billed for damaged equipment.
- 5) Accidents and/or breakdowns must be reported immediately to the student's instructor.

Medical, Dental, Psychological Care

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

Visa Services / Instruction in English

Mayfield College does not offer visa services to prospective students from other countries or English language services. All instruction occurs in English.

English language proficiency is determined during the admissions interview and documented by the School Acceptance signature on the enrollment agreement.

Child Care Mayfield 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 does 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.

Photo Release At Mayfield 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 and advising are readily available to students with special academic difficulties. Enrollees are encouraged to immediately request an appointment with their instructor if any scholastic problems arise. All students are urged to take advantage of this valuable assistance. The administration welcomes any suggestions in which any aspect of the school can be improved. Suggestions should be directed to the school director.

Resource Center Mayfield College offers publications and services directly related to all course work offered by the School. Print acquisitions such as books, magazines, and newsletters 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 may visit and observe you in the classroom. Casual business attire is required. Shorts, beachwear, jeans, see-through fabric, low necklines, hemlines more than 4 inches above the knee, baggy trousers, thongs are not appropriate attire for school.

Job Placement Assistance Mayfield College provides placement services for all program completers. Our placement process consists of the following steps we have found effective to place students into jobs in the field they have studied. 1) Conduct regularly scheduled meetings with the student to assure the placement process is on track, 2) provide job-seeking skills training in class, 3) provide job leads, 4) interview and conduct self-assessment testing of the student to determine interests and skills, 5) assist in the preparation and writing of resumes and cover letters, 6) provide training for filling out job applications, and 7) educate the student about how to properly prepare for a job interview.

ADA Accommodations Policy

In accordance with the Americans with Disabilities Act, Mayfield College provides disability accommodations for students with identified and/or diagnosed disabilities. Students with disabilities need not inform their instructors about the nature of their disabilities, but they are responsible for contacting and providing appropriate documentation to the Disability Services Coordinator prior to receiving accommodation. The process for requesting accommodation(s) is:

- The student should contact the Disability Services Coordinator to provide appropriate documentation regarding the disability
- The Disability Services Coordinator will provide a letter of accommodation, which must be signed by the student prior to its being distributed to faculty
- The Disability Services Coordinator will notify the student when the accommodation letter has been sent to the faculty members requested.
- Once the accommodation letter has been sent to the faculty requested by the student, it is the student's responsibility to meet with each faculty member to discuss how his/her accommodations may be met within each course.

Mayfield College will attempt to meet reasonable accommodations requested. A reasonable accommodation is a modification to a non-essential aspect of a course, program, service or facility which does not pose an undue burden and which enables a qualified student with a disability to have adequate opportunity to participate and to demonstrate his or her ability. Such accommodations are determined on an individual basis depending upon the nature and extent of the disability. If a student has a documented disability which requires accommodation(s), or if more information is needed, please contact the Disability Services Coordinator at 760-328-5554.

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 at all times.
- 7) Any type of harassment, horseplay or threats of any kind will not be tolerated.
- 8) Any physical violence will be reported to the local sheriff.
- 9) Use of profanity, insubordination, dishonesty and violation of safety rules are unacceptable behaviors and will not be tolerated.
- 10) Use or sale of non-prescription drug/s, alcohol will not be tolerated on the School premises and/or surrounding structures.
- 11) Mayfield College maintains a smoke-free environment.
- 12) Food or drink is **NOT** permitted in the classrooms, unless designated by the school director.

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

Campus Crime Security Policy

Jeanne Clery Disclosure of Campus Security Policy and Campus Crime Statistics

Any student, faculty member, or employee of Mayfield College should directly report any potential criminal act or other emergency to any officer or representative of Mayfield College at 760-328-5554 for assistance during school hours. The Mayfield College Officer will immediately call the local police/sheriff's offices. If any potential criminal act or emergency occurs after school hours, reports should be made to the local police/sheriff's offices:

City	Police/Sheriff
Bermuda Dunes	760-863-8990
Cathedral City	760-770-0300
Desert Hot Springs	760-329-6403
Indian Wells	760-836-1600
Indio	760-347-8522
La Quinta	760-863-8990
Palm Desert	760-836-1600
Palm Springs	760-323-8116
Rancho Mirage	760-836-1600
Thousand Palms	760-836-1600
Twentynine Palms	760-367-9546

Upon receipt of a call, officers are dispatched to the site, an investigation is conducted and appropriate action taken. Please be as detailed as possible when providing a physical description of a suspect or perpetrator to the police and to the Mayfield College officer. Along with describing a person's height, weight and build, try to include information pertaining to facial hair, skin complexion, jewelry and tattoos (where applicable). Vehicle descriptions should include, make, model, color and approximate year of manufacture. When possible, try to record marker plate, state of origin, and any notable damage to the vehicle. It is also imperative that crime scenes not be disturbed so as to preserve any physical evidence that may exist.

Mayfield College enforces drug and alcohol regulations as required by federal and state regulations. The unlawful possession, use or distribution of alcohol by employees on school property or as part of any school activity is prohibited. The Family Educational Rights and Privacy Act (FERPA) as amended in 1998 enables Mayfield College to release to parents of students under the age of 21 information concerning alcohol or drug related disciplinary violations. Illegal drugs and drug paraphernalia are prohibited on campus. The possession, sale, manufacture or distribution of any controlled substance is in violation of school regulations and illegal under both state and federal laws. Therefore, any employee or student engaging in such illegal action will be subject to disciplinary procedures, which could result in sanctions, including termination of employment, suspension or expulsion from school, and criminal prosecution.

Students may obtain copies of the complete Jeanne Clery Disclosure of Campus Security Policy and Campus Crime Statistics Act from the Student Services Office.

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 the conduct section in 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 and choose the School they wish 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 you have to repay 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.
4. If you have unresolved complaints after following the grievance procedures, you may contact the [Bureau for Private Postsecondary Education](#). Read the section on grievance procedures carefully.

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 affected.

Step Two: If Step one has not resolved the problem, the student must in writing, appeal to the School Director, within 48 hours 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 hearing within 24 hours 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. Testimony will be presented by the student and all other parties involved. Minutes will be taken.
- f. After all testimony is presented, the committee will immediately meet in the absence of those involved to review the testimony.
- g. A vote will be taken and a decision will be made.
- h. The decision of the committee will be immediately reported to all interested parties.

Step Four: A student who, after exercising the procedure set forth above, and making every

attempt possible to find a solution, has not been successful, has the right to forward the complaint to the following agency:

Bureau for Private Postsecondary Education
P.O. Box 980818
Sacramento, CA 95798-0818
888.370.7589
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 Commission. 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
(770) 396-3898

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

Students may receive comparable program information related to tuition and program length by contacting:

The Council on Occupational Education
7840 Roswell Road, Building 300, Suite 325
Atlanta, GA 30350
(770) 396-3898

DISCLAIMER

Mayfield College, through appropriate action, reserves the right to change any provision of requirement at any time within the student's term of training. This School also reserves the right to make changes in equipment, materials, curriculum as it deems necessary. When size and curriculum permit, classes may be combined to provide meaningful instruction and training and contribute to the level of interaction among students. The provisions of this publication to, however, supersede any previously stated provision either written or oral.