ERIE INSTITUTE OF TECHNOLOGY

2022-2023 Catalog

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ERIE INSTITUTE OF TECHNOLOGY

Main Campus
940 Millcreek Mall
Erie, Pennsylvania 16565

Satellite Location
122 West 13th Street
Erie PA 16501

Phone: (814) 868-9900
Toll-free: 1-(866) 868-3743
Fax: (814) 868-9977
E-mail: info@erieit.edu
Web Site: www.erieit.edu

PROGRAMS OF STUDY

Computer Department

Business and Information Management
Network and Database Professional
Web Design and Social Media Marketing

Electronics Department

Electronics Engineering Technology
Electronics Technician
Medical Equipment Technician

Manufacturing Department

CNC / Machinist Technician
Industrial Maintenance and Mechatronics

Medical Department

Medical Billing and Coding
Phlebotomy Technician

Skilled Trade Department

Automotive Body Technician
Electrician
Heating, Ventilation & Air Conditioning / Refrigeration Technology
Welding Technology

Photo Credits

Photos contained within the catalog were taken by EIT Multimedia Graphic Design graduate, Lowell Allen Chelton.

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EIT HISTORY

Erie Institute of Technology, founded in 1958 as A.T.E.S. Technical School, is an end product of many years of experience and planning in the field of technical education. In 1976, the school name was changed to Erie Institute of Technology and was incorporated with the principal officers being Clinton L. Oviatt, Jr. and Charles J. Wettekin. Roger C. Scarlett became an additional officer of the corporation in 1993. It quickly became an area leader in electronics training.

The Institute moved to 2221 Peninsula Drive, Erie, PA in 1981. In 1986, EIT was authorized by the Department of Education of the Commonwealth of Pennsylvania to award the Associate in Specialized Technology Degree for an expanded curriculum in Electronic Engineering Technology.

In 2001 EIT was purchased by area developer Rick Griffith and moved to a new location on upper Peach Street. Electronics training programs were expanded and now include Electronics Engineering Technology, Electronics Technician and Medical Equipment Technician. Computer programs were added featuring Multimedia Graphic Design, Network and Database Professional, and Business & Information Management.

Shortly after moving to the new location, EIT outgrew its new facility. At about the same time, Mr. Griffith purchased the assets of the former *CAMtech*, an advanced manufacturing and technology school, which had closed its doors. The decision was made to combine those programs with EIT programs in an entirely new location. Several sites were considered and the former Blair Building at the Millcreek Mall was selected. After extensive renovation, the building opened for the 2007 spring semester classes.

The expansive manufacturing equipment bay and specialty labs house the newly updated former *CAMtech* manufacturing programs, including programs in: CNC Machinist Technician, and Industrial Maintenance and Mechatronics. The facility is larger than the former *CAMtech*'s Knowledge Park location and the expanded classroom and labs not only provide ample room for this training, but also allow expansion of additional EIT programs, including HVAC/R, Electrician, Welding, and Automotive Body Technician.

In 2016, the school added a Satellite Location at 122 West 13th Street, Erie PA to house the laboratory portion of the Automotive Body Technician program.

In 2019, the school again expanded its program offerings with the addition of the Medical Billing and Coding program and the Phlebotomy Technician program.

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EIT PHILOSOPHY & MISSION

EIT is dedicated to developing the individual abilities of each student by providing them with the necessary skills and supporting knowledge to meet the entry-level job requirements for computer, electronics, manufacturing, and technology careers. In order to achieve this, programs at EIT provide students with a combination of practical laboratory training and classroom instruction. EIT then offers placement assistance to aid its graduates in locating gainful employment.

The most important prerequisites of a student are good attitude and initiative. EIT's overall objective is to combine these student attributes with the school's programs to help individuals toward a career of their choice.

We trust our school can become a beneficial part of your individual growth in education.

ABOUT EIT

FACULTY AND STAFF
The faculty and staff members, through years of training and/or experience, are well qualified to serve our students in a professional manner. Instructors offer comprehensive coverage in theory and practical laboratory training and have the ability to teach in a manner that is easily understood.

LICENSE AND ACCREDITATION
EIT is licensed by the Pennsylvania State Board of Private Licensed Schools. The Pennsylvania State Board of Private Licensed Schools is an administrative board within the Pennsylvania Department of Education.

EIT is approved by the Ohio State Board of Career Colleges and Schools, Reg. # 03-11-1693T.

EIT is accredited by the Accrediting Commission of Career Schools and Colleges (ACCSC). This commission is a recognized accrediting agency under the provision of Chapter 33, Title 33, U.S. Code and subsequent legislation.

MEMBERSHIPS & AFFILIATIONS
Career Education Colleges and Universities (CECU)
Pennsylvania Association of
Private School Administrators (PAPSA)
Pennsylvania Association of Student
Financial Aid Administrators (PASFAA)
Microsoft IT Academy
National Tooling and Machining Association (NTMA)
Manufacturers' Association of Northwest Pennsylvania
American Welding Society (AWS)

FACILITY
EIT consists of a 40,000+ square foot building containing a reception area, offices, conference rooms, a technical resource library, 28 classrooms and laboratories that are computer ready, book store, student lounge, outside deck areas, and a separate manufacturing educational lab area. Ample parking is available. The school is located in the Millcreek Mall and is convenient to the I-90 and I-79 interchanges. Additionally, the school also operates a Satellite Location, located at 122 West 13th Street, Erie PA which houses the laboratory portion of the Automotive Body Technician program.

EQUIPMENT
Classrooms for all programs include marker boards, tables, and chairs. In addition, audio-visual equipment such as overhead projector, VCR, DVD, and multimedia projector equipment are available. The entire facility has wireless network access with high-speed internet connection.

Electronics: The basic electronic laboratory includes power supplies, function generators, oscilloscopes, volt-ohmmeters, RF oscillators, and industrial trainers. The advanced electronics laboratory includes digital trainers, microprocessor trainers, educational laser, fiber optic equipment, robotic arm, and various other pieces of specialized test equipment.

Computer: Laboratories consist of Pentium computer systems, complete with networked laser printers. Also, a large assortment of electronic components is maintained for student use in performing laboratory experiments.

Manufacturing: The major equipment for the CNC / Machinist Technician program includes: CNC Vertical Machining Center, CNC Lathe w/ live tooling, CNC Horizontal Machining Center, Engine Lathe, Vertical Knee Mill, and Surface Grinder.

The Industrial Maintenance and Mechatronics program major equipment includes: Amatrol Mechanical Drive Systems, Amatrol Hydraulic/Pneumatic Systems, Amatrol Motor Control System, Amatrol Electromechanical Training System, and the Amatrol Thermal Environmental Training System.

Skilled Trades: The Heating Ventilation & Air Conditioning / Refrigeration Technology program major equipment includes: Amatrol Motor Control systems, Thermal / Environmental Training systems, Plumbing Maintenance system, and Electromechanical Training system, as well as other refrigeration equipment.

The Welding Technology program major equipment Includes: multiple Invertec V350 Pro Multi Process Welding Machines, multiple Precision Tig 275 Welding Machines and multiple ProCut 55 Plasma Cutting Machines.

The Electrician program major equipment includes: multiple motors and generators, multiple hydraulic / pneumatic systems, multiple control systems, multiple residential / commercial services, and multiple electromechanical training systems.

The Automotive Body Technician program major equipment includes: a heated paint booth, frame straightening machines, frame measuring systems, car lifts, transmission service jacks, tire machine balancer, welding machines, sand blaster, air compressors, heat lamps, and a head lamp aimer.

Medical
The Medical Billing and Coding department equipment consists of Pentium computer systems, complete with networked laser printers and all necessary related software.

The Phlebotomy Technician program major equipment consists of Phlebotomy Chairs, Phlebotomy Stands, Rolling Stools, Work Tables, Storage Cabinet, and a Refrigerator/Freezer.
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LIBRARY
EIT maintains a technical library consisting of over 1,800 texts and technical manuals as well as periodicals in the fields of computers, electronics, and manufacturing. Students are encouraged to utilize the library resources, as well as on-line resources such as *GALE* -- which provides global access to one of the largest online content repositories in the world -- in order to supplement classroom texts, satisfy special interest areas, or to keep abreast of some of the latest developments in the fields of computers, electronics, and manufacturing.

NON-DISCRIMINATION POLICY
Erie Institute of Technology adheres to a policy of nondiscrimination and equal opportunity for all persons regardless of race, creed, color, sex, disability, religious affiliation, sexual orientation, or national origin. This policy is applicable to all decisions regarding selection for admission, financial aid to students, application for employment and all other personnel and placement activities.

Admissions

ADMISSIONS REQUIREMENTS
Applicants must be a High School graduate or possess an official General Education Diploma (GED), and must submit proof of a high school diploma or GED certificate either by a copy of said credential or official verification from the issuing authority.

Applicants for all EIT programs will be required to complete a Wonderlic Scholastic Level Exam (SLE).

Students in the Electrician and Auto Body Technician programs must achieve a score of 14 or greater on the exam.

Students in all other programs must achieve a score of 13 on the exam.

However, applicants with prior post-secondary education credits at an accredited institution may be exempt from taking the Wonderlic SLE evaluation and are eligible for admittance based on the receipt of an official transcript reflecting successful completion of 30 or more credits.

Note: There are organizations online that claim to provide a "high school diploma" or "GED" for a fee with minimal or no student work required. Many certificates and diplomas of this nature are not valid and students cannot be admitted based on such documentation. Please see the admissions department for the Policy on Validating High School Diplomas.

ENROLLMENT PROCEDURES
All applicants to Erie Institute of Technology must be a minimum of seventeen (17) years old for all programs.

All applicants to EIT must complete an Application for Admission.

All applicants must complete a personal interview and tour of the campus with an Admissions Representative prior to enrollment.

All applicants must complete an Enrollment Agreement. If the student is less than 18 years of age, a parent or guardian must also sign the Enrollment Agreement.

Upon completion of the requirements of admission, the school administration will review the information and then inform the applicant in writing if they have been accepted for enrollment. If an applicant is not accepted, all fees paid will be refunded.

All applicants will be required to attend an orientation session held prior to the beginning of their program.

Class sizes are limited to a maximum number of students per program and will be closed to enrollment when that number is reached. Enrollment is granted on a first-come first-served basis only to applicants who have completed all admission requirements and enrollment procedures. Applicants who have not become enrolled in a class that has been closed have the option to register for a future class. Also, please note that all classes are subject to minimum enrollment.

ADVANCED PLACEMENT & STANDING
Students who wish to transfer credits from other accredited institutions must provide an official transcript and course description from the institution. Advanced standing will be determined by evaluation of transcripts, by pre-approved articulation agreements, or by advanced standing testing if deemed necessary. All arrangements must be finalized before the beginning of the first term of the program. Tuition credit will be prorated accordingly.

Note: When student enrollment status is less than full-time, financial aid funding may be affected.

TRANSFER OF CREDITS
The listing of credit hours is not meant to imply transferability of credits. EIT does not guarantee transferability of credits to any college, university, or institution of higher learning. The receiving institution decides whether to accept credits for transfer.

HOUSING
The school maintains a list of available housing throughout the school area as a service to assist students in locating suitable housing. However, EIT cannot assume responsibility for such choices.

Academic

CLASS SCHEDULE
Two class sessions are offered daily. Not all programs are offered during all sessions – check with Admissions for current schedules:

Morning:	8:00 AM – 12:50 PM, M - F
Afternoon:	1:00 PM – 5:50 PM, M – F
Evening:	Varies by Program.

Externship schedules are coordinated with each particular externship site.

CLASS STRUCTURE

Class size varies according to program and class start date. Maximum class size is 25 students.

CREDIT HOUR DESCRIPTION

Erie Institute of Technology's programs are measured in length by semester credit hours and by clock hours. One credit hour is awarded for 15 hours of lecture or theory class, 30 hours of laboratory experience, or 45 hours of externship. In addition, work outside the classroom (homework, etc.) is required for all programs offered at the school. A standard class hour is 50 minutes.

STUDENT ENROLLMENT STATUS

Erie Institute of Technology is considered a quarter-term school operating on the basis of semester credits, with 3 quarter terms of full time enrollment per academic year. A term is approximately 12 weeks in length.

Grade level advancement for Federal Direct Loans applies to all programs eligible for Title IV funding. In order to be considered a second year student, a student must complete the entire first academic year (approximately 36 weeks) and have earned at least 24 semester credits.

SATISFACTORY ACADEMIC PROGRESS

Erie Institute of Technology has established standards of Satisfactory Academic Progress (SAP) that apply consistently to all full-time and part-time students. These standards are used to evaluate academic progress for all periods of all students' enrollment, even those periods in which the student may not have received federal student aid. Students will be evaluated for SAP at the conclusion of each evaluation period. The evaluation period for all students is 12 weeks. In order to be making Satisfactory Academic Progress, the student must meet all three standards.

1. Cumulative Grade Point Average. At the time of evaluation, the student must have a cumulative grade average of 2.0 minimally.
2. Pace of Completion. The pace of completion will be measured by comparing the number of credit hours attempted with the number of credit hours earned. At the time of evaluation, the student must have earned at least 2/3 of all credit hours attempted.
3. Maximum Time Frame. A student will be expected to complete his or her program within 150% of the normally established time. The maximum timeframe is 150% of the published length of the program, measured in credit hours. If at any point the school determines that a student cannot finish the program within the maximum time allowed, the student will be terminated from the program. A grade awarded as Incomplete (I) or Withdrawn (W) will have those credits counted as attempted for purposes of determining maximum time frame and the pace of completion. Credits transferred from another institution will be counted both as attempted and completed credits when measuring the pace of completion. For students who transfer or restart in another program at the school, only those credits that apply to the new program will be counted when determining both Satisfactory Academic Progress and Cumulative Grade Point Average.

FINANCIAL AID STATUS

Students who have met all the requirements of SAP will be considered in Good Standing with financial aid. Students who fail to meet SAP at the end of an evaluation period will automatically be put on a Financial Aid Warning (FAW) status for the following evaluation period. The FAW status cannot be appealed. Students may only be placed on FAW for a single consecutive period and will continue to be eligible for financial aid throughout that period. Students who meet SAP after one period of FAW will be returned to Good Standing, but will be monitored for progress.

Students who fail to regain SAP after one evaluation period of FAW will be placed on Suspension for the following period. During the suspension, students are not eligible for financial aid and may be required to find an alternative method of funding, or may be terminated. Students who wish to appeal the determination of suspension must do so in writing, by completing the Satisfactory Academic Progress Appeal Form. The form can be obtained from the Director of Education. The reasons for the appeal must be the result of mitigating circumstances (death in family, illness, hospitalization, Covid19, etc.). The circumstance must be documented and documentation must be included to support the claim. The appeal must include information as to why the student did not meet SAP and what has changed in their situation that will allow them to demonstrate SAP at the next evaluation. Appeals must be made to the School Director or the Director of Education within 7 days of the last day of the evaluation period. An appeal decision will be made within 3 business days of receiving the appeal and the student will be notified accordingly. A copy of the appeal, documentation, and final determination will be kept in the student's academic record. If the appeal is granted, the student will be placed on Financial Aid Probation (FAP) for one evaluation period and aid will be reinstated. Appeal approvals may require the student to sign a written Academic Plan, indicating what will be required to attain SAP by the next evaluation point.

If the appeal is denied, the student will remain on FA Suspension for that evaluation period. If the student has not met SAP standards by the following evaluation period they will be terminated. If SAP is met after a period of Suspension the student will placed on FA Probation status for one evaluation period and aid will be reinstated.

Credits transferred from another institution of higher learning will be counted as both attempted hours and completed hours for SAP purposes.

Students may not appeal a dismissal for violating the 150% maximum time frame rule. Students who are reinstated after a period of suspension will meet with the

Director of Education to be given an Academic Plan which will indicate what steps must be taken to achieve and/or maintain financial aid eligibility. Academic Plans are created on an individual basis and could include weekly academic performance requirements, specific attendance requirements beyond what is stated in the catalog, mandatory tutoring sessions, or regularly scheduled meetings with an academic advisor, program director, financial aid advisor, or student services advisor.

GRADING

Tests are given according to individual course requirements. Homework, laboratory work, and attendance is also graded and included with test grades to determine course grades. Grade reports are issued each term, a term being approximately 12 weeks in length. All grades are recorded on the following scale:

Percentile Grade	Letter Grade	Grade Point
93 - 100	A	4.0
85 - 92.9	B	3.0
75 - 84.9	C	2.0
70 - 74.9	D	1.0
Below 70	F	0
Incomplete	I	0
Repeat	R	0
Withdrawal	W	0

INCOMPLETE GRADE

The incomplete grade, "I" may be given at the option of the instructor when, because of extenuating circumstances, the student is unable to complete the work of a subject within specified allowed time. Unless otherwise specified by the instructor, the student will have two weeks to make up the incomplete coursework. If not completed within that time frame, the grade becomes an "F."

WITHDRAWAL / TERMINATION & REPEATS

Students considering withdrawal from the school should notify the Director of Education immediately to discuss options and gain a full understanding of the decision to withdraw.

Official Withdrawal: Students wishing to withdraw must sign a withdrawal request and indicate their reason for doing so. Students are advised to meet with the Bursar and/or Financial Aid department to determine the effects of withdrawal and to make a payment plan for any balance due.

Unofficial Withdrawal: Students who fail to follow the Official Withdrawal procedure, or students who are terminated, will be considered unofficial withdrawn. A written notice will be signed by a school official and be delivered to the student either in-person or by regular first class mail. The school shall assume unofficial withdrawal by the student if the student has not attended classes for a period of 14 calendar days, unless otherwise documented that the student has an unusual circumstance and intends to return to classes. A student may be terminated for reasons such as unsatisfactory progress, nonpayment of tuition and/or fees as well as failure to comply with the rules and regulations of the school.

Students who are withdrawn or terminated prior to the completion of a course will receive a grade of "W" for those courses. Students re-enrolling will be required to complete the entire course from which they withdrew or were terminated. If a student fails a course(s), the student will receive an "F" and will be required to retake and satisfactorily complete the failed course(s).

Upon successful completion, the student's initial grade will not be calculated in the Cumulative Grade Point Average (CGPA), but the credits will be counted as attempted for the course completion percentage per the Satisfactory Academic Progress (SAP) Policy. The new grade will be calculated in the CGPA and counted as both attempted and earned credit(s) for SAP.

For students repeating failed courses, the school allows for multiple repetitions and repeated courses will count towards the calculation of the student's course load. For students repeating passed courses, the school allows for one repetition and the repeated course will count towards the calculation of the students course load.

STUDENT ADVISING/TUTORING

Students having academic problems are encouraged to discuss them with their Instructor or the Director of Education. Tutorial assistance is available to those who are experiencing academic difficulty and request such assistance. Students having other problems affecting school performance are encouraged to discuss them with the Student Services Coordinator. Additionally, EIT maintains a list of community services that may be helpful to the student.

ATTENDANCE / TARDINESS POLICY

Students are expected to attend all classes, arriving on time and remaining in class until the end of the period. Students missing class will be docked accordingly. Students' attendance will be reflected as a grade, not to exceed 10% in each course.

Students who miss two consecutive weeks (14 calendar days) of scheduled class may be considered unofficially withdrawn.

MAKE-UP WORK

Classroom work missed during an excused absence may be made up through arrangements with the Instructor or Director of Education. Make-up work will not be authorized in the case of an unexcused absence. Class cuts are considered unexcused absences. Make-up work is not permitted for the purposes of receiving Veteran's training allowances. There will be no cost for make-up work.

STUDENT CONDUCT

In order to encourage an educational environment that is conducive to learning, the school has established reasonable expectations for conduct.

Students are expected to be courteous at all times. Students at EIT are considered as ADULTS and are given the respect due an adult as long as the behavior of the student warrants.
The Instructor will have and maintain complete control of the classroom or laboratory training sessions at all times.

The Instructor's authority will not be challenged or compromised in any situation. Students not conforming to this rule will be subject to disciplinary action by the Director.

The Director, upon conference with the Instructor and/or student, may permanently dismiss any student whose conduct is deemed unsatisfactory.

ACADEMIC LEAVE OF ABSENCE

Should a student find it necessary to be out of school for an extended period of time, an Academic Leave of Absence (ALOA) can be requested in writing by the student and submitted to the school Director or Director of Education. The written request should describe the extenuating conditions that necessitate the ALOA and the expected date the student intends to return to school. The student may need to meet with the Director of Education to determine their return date, based on availability of courses.

Because students at EIT do not qualify for a Federal Leave of Absence for Title IV purposes, all students who are granted an ALOA will be treated as officially withdrawn for Title IV purposes and must follow the school's re-entry procedure for returning to school after their ALOA.

RE-ENTRANCE POLICY

Students who have their training interrupted, and wish to return to school, should contact the Director of Education to determine eligibility. All prior financial balances must be satisfied or satisfactory payment arrangements made prior to re-entry. If interruption of training was the result of excessive absenteeism or disciplinary action by the school, re-entrance will be at the sole discretion of the Director and may involve a probationary period. If the student was not meeting minimum SAP at the time of interruption, the student must submit a successful appeal as to their loss of financial aid eligibility before reentering. Please see the Satisfactory Academic Progress and Financial Aid Status sections of this catalog for more details.

GRADUATION REQUIREMENTS

To be eligible for graduation, a student must obtain a cumulative grade point average of 2.0, successfully pass all courses, and must satisfy all financial obligations to the School.

PLACEMENT SERVICE

EIT provides an active placement assistance program, without additional charge, for all graduates who desire assistance and so register their request with the school**.** Employment opportunities may require, but are not limited to, the following: relocation, valid driver's license, driving record review, drug screening and criminal background checks (various clearances include Act 31, Act 33, Act 34, Act 73).

Law prohibits any school from guaranteeing a job.

However, we do feel a strong responsibility for placement and will assist in every way possible. The success of the placement program will be greatly influenced by student attendance, overall attitude and academic records. The placement assistance program will include but not be limited to:

1. Class instruction in job searching techniques and interviewing techniques.
2. Assistance in preparation of applications, letters and resumes.
3. Assistance in establishing job interviews.

Other School Policies

POLICY REGARDING ACCESS TO STUDENT FILES

Erie Institute of Technology strictly adheres to federal legislation regarding the release of any information regarding students' academic status or private records in accordance with the Family Educational Rights and Privacy Act (FERPA) (U.S.C. § 1232g; 34 CFR Part 99) which is a federal law that protects the privacy of student education records. All files are kept in fireproof cabinets and are under the control of the Director of Education.

Generally, school must have written permission from an eligible student in order to release any information from a student's education record. However FERPA allows schools to disclose those records, without consent, to the following parties or under the following conditions (34 CFR § 99.31):

- School officials with legitimate educational interests;
- Other schools to which a student is transferring;
- Specified officials for audit or evaluation purposes;
- Appropriate parties in connection with financial aid to a student;
- Organizations conducting certain studies for or on behalf of the school;
- Accrediting organizations;
- To comply with a judicial order or lawfully issued subpoena;
- Appropriate officials in cases of health and safety emergencies; and
- State and local authorities, within a juvenile justice system, pursuant to specific state law.

A student request for records must be in writing and include the following:

1. Specific information to be released
2. The reason for release
3. Names of the parties to which records are to be released
4. Student signature

All records are reviewed and updated periodically. All releases of information will be documented. Respecting the privacy of student records is paramount; however, the school provides access for students, or the student's designee, to review their records upon request. The school will provide supervision and interpretation of records. The school policy for student access to records is as follows:

1. Original documents may not leave the premises
2. All records must be reviewed with the appropriate school official present
3. Transcripts will be made available under the terms of existing school policy

EIT COMPLAINT PROCEDURE

Students having a complaint or grievance are encouraged to seek resolution through the following steps:

1. Instructor -- Problems that cannot be resolved by the Instructor and student may be brought to the Director of Education.
2. Director of Education -- Problems that cannot be resolved by the Director of Education and the student may be brought to the School Director.
3. School Director -- Problems that cannot be resolved by School Director and the student may be brought to a Review Committee.
4. Review Committee -- Appointed by the School Director to meet with the interested parties to seek a resolution to remaining problems. The Review Committee, at a minimum, will consist of the School Director, affected staff member(s), two unaffected staff members, and the affected student.

STUDENT COMPLAINT/GRIEVANCE PROCEDURE

Schools accredited by the Accrediting Commission of Career Schools and Colleges 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 Commission must be in written form, with permission from the complainant(s) for the Commission 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 Commission. Please direct all inquiries to:

Accrediting Commission of Career
Schools and Colleges
2101 Wilson Blvd. Suite 302, Arlington, VA 22201
Phone: 703.247.4212 | Fax: 703.247.4533

A copy of the commission's Complaint Form is available at the school and may be obtained by contacting the Director of Erie Institute of Technology.

In order for the PA State Board of Private Licensed Schools to investigate a complaint, a student must first follow the school's written policy for procedures concerning student grievances and provide information in written form as listed on the "Student Complaint Questionnaire". A copy of the complaint will be sent to the school. Please direct all inquiries to:

PA State Board of Private Licensed Schools
Pennsylvania Department of Education
333 Market Street
Harrisburg PA 17126-0333
Phone: 717.783.8228 | Fax: 717.772.3622

A copy of the PA State Board of Private Licensed Schools "Student Complaint Questionnaire" may be obtained by contacting the Director of Erie Institute of Technology.

SNOW DAY PROCEDURES

The following school policy is intended to establish an efficient method of determining school closings due to inclement weather. Common sense must prevail in determining whether to attend classes or not. Students are urged not to take unnecessary risks in attending classes when local road conditions are hazardous.

In order to ensure a uniform method of informing students of a school closure due to inclement weather, notice of the cancellation will be posted on the following:

- WICU (TV 12)
- WJET (TV 24)
- WSEE (TV 35)
- WFXP (TV 66)
- www.YourErie.com
- www.ErieNewsNow.com
- www.facebook.com/ErieInstituteofTechnology

Financial Assistance

FINANCIAL REQUIREMENTS

Each student is provided with a signed copy of the Student Enrollment Agreement that gives their specific program costs including tuition, estimated books, estimated supplies/ equipment, lab fees, tech fees and additional associated costs. All costs are subject to change.

FINANCIAL ASSISTANCE

Finances are an important consideration when preparing for an education. Erie Institute of Technology participates in several financial aid programs for eligible students. The Financial Aid Office assists students in completing all applications for aid, and each student's financial arrangements are tailored to the program for which he or she has applied.

Erie Institute offers the following types of students who qualify:

- Federal Pell Grant
- Federal SEOG Grant
- Federal Student Loans
- PHEAA State Grant and Special Programs
- Alternative Student Loans
- Institutional High School Senior Scholarship
- Veterans Education Benefits
- Other outside agency funding and scholarships.

All loans require repayment. Information on repayment plans for federal student loans can be found at: https://studentaid.ed.gov/sa/repay-loans/understand/plans. Please contact the Financial Aid office at 814-868-9900 for full details on available funding.

RIGHTS AND RESPONSIBILITIES

Students who receive financial aid have a right and responsibility to understand the following:

- Understand financial aid awarded is for one academic year only. Future academic years will be packaged as progress is made through school.
- Reapply annually by completing the Free Application for Federal Student Aid (FAFSA) along with any other required applications.

- Meet eligibility requirements mandated by the institution and government, which include maintaining Satisfactory Progress as defined by Erie Institute of Technology.
- Understand that the financial aid package may be adjusted due to changes in funding or other events unknown at this time.
- Notify the Financial Aid Administrator in writing of any changes in their family's financial situation as well as any aid they receive from outside resources (other than those shown on the award letter), which may result in an adjustment to the financial aid awarded.
- Students are entitled to an explanation of the award process, which includes but is not limited to; the financial aid budget, expected family contribution, and award packaging. Questions regarding any aspect of financial aid should be addressed to the Financial Aid Director.

APPLYING FOR FINANCIAL AID

During the admissions process, applicants are given the opportunity to meet with a financial aid staff member who can provide all the necessary forms and instructions to apply for aid. For federal student aid students (and parents) must complete a FAFSA at fafsa.ed.gov. The financial aid office will also review the applicant's prior financial aid history to develop an estimated financial aid award package for the applicant. Eligibility requirements vary and are described in the Consumer Information Guide found on the school's website or are available by contacting the main office at 814-868-9900.

SCHOLARSHIPS

The school offers a Senior Scholarship to qualified high school graduates. Scholarship dollar amount is up to 25% of the costs of tuition for the student's program. To apply for the scholarship, students must complete the Scholarship Application, which can be obtained from their High School Guidance Counselor, or by calling the admissions office at 814-868-9900. Up to 14 scholarships will be distributed among the selected programs, awarding no more than three scholarships in any one program at a time. Recipients may use their award for programs that begin up to one year form the date of their high school graduation. Deadline to apply is May 1st of the year of high school graduation.

REFUND POLICY

In the case of withdrawal, the school will calculate an institutional refund of charges on a prorated basis. Charges are calculated by dividing the number of days of the term completed by the total number of days in the term. Charges are calculated based on the student's last date of attendance in the term. The following proration is applied to the tuition charges for the term from which the student withdrew.

00.0-10% completion = 90% refund
10.1-20% completion = 80% refund
20.1-30% completion = 70% refund
30.1-40% completion = 60% refund
40.1-50% completion = 50% refund
50.1-60% completion = 40% refund
Over 60% completion = No refund

After commencement of classes, if a student decides to drop from a course, or multiple courses, but not withdraw from school altogether, the institutional refund policy will take effect for the courses that were dropped.

When a student withdraws from school, the amount of Title IV assistance earned by the student must also be determined. Students are entitled to retain or receive only that portion of federal student aid they earned based on their time in attendance. In the event that earned Title IV assistance does not cover all unpaid institutional charges, the student may be responsible for those costs.

If the amount of Federal Student Aid disbursed to the student is greater than the amount earned, all unearned funds will be returned by the school, according to the Return of Title IV policy.

If it is determined that the student has Federal Pell Grant or FSEOG that has been earned but not yet received, the school will disburse the earned amount. Federal Loan funds that have been earned but not received require borrower acceptance before a post-withdrawal disbursement (PWD) can be made. PWD eligibility notification will be mailed to the student and/or parent offering them the option to accept or decline any/all of the earned loan funds. The student and/or parent must return the PWD form to the school within 14 days of the date of notification. If no response is received within this time frame, no loan disbursements will be made.

RETURN OF TITLE IV

The Return of Title IV formula provides a return of unearned Title IV aid if the student withdraws before completing 60% of the term from which they withdrew. Earned Title IV aid is calculated by dividing the number of days of the term completed by the total number of days in the term, based on the student's last day of recorded attendance. If a student fails to inform the school that he/she wishes to withdraw, the date of determination will be 14 calendar days after the student's last date of recorded attendance. All unearned Title IV funds will be returned by the school within 45 days from the date of determination. Refunds of unearned Title IV aid will be made by the school in the following order:

1. Federal Direct Unsubsidized Loans
2. Federal Direct Subsidized Loans
3. Federal Direct PLUS Loans
4. Federal Pell Grant
5. Federal SEOG

CANCELLATION

All monies paid by an applicant who has not attended any classes will be refunded if a request is received within 14 days after making initial payment of signing an enrollment agreement. An applicant requesting cancellation after attending class is entitled to a refund of any monies paid, in excess of the $125.00 application / registration fee, if the request is made within 14 calendar days from the scheduled starting date of class. Students who cancel during this period will be financially responsible for any textbooks, kits, or supplies issued. Unused textbooks or any other student- issued equipment or supplies may be returned for a full refund, provided they are determined to be re-sellable and in new condition. Items returned for refund must be returned within seven days of cancellation.

Applicants who have not visited the school prior to signing an enrollment agreement can request cancellation without penalty within 3 business days following the regularly scheduled orientation procedures or following a tour of the school and inspection of training equipment. Refunds for cancellations will be made within 30 days of the date of request. Applicants denied admission to the school are entitled to a full refund of all monies paid.

If the program starting date must be cancelled or postponed for any reason, immediate alternate plans will be instituted, or if impractical, a full refund of all monies paid will be issued. In the event of a permanent school closure, all enrolled students shall be entitled to a full refund of all monies paid.

VETERANS BENEFITS AND TRANSITION ACT OF 2018 S.2248 SECTION 103.1(b)

A *Covered Individual* is defined as an individual who is entitled to educational assistance under Chapter 31, Chapter 33 (Post-9/11 GI Bill®) or Vocational Rehabilitation and Employment benefits.

EIT will not impose a penalty on a *Covered Individual*, including the assessment of late fees, the denial of access to classes / libraries / institutional facilities due to the delayed disbursement funding from VA under Chapter 31 and Chapter 33.

EIT will not require that a *Covered Individual* to borrow additional funds because of the inability to meet their financial obligations to the institution due to the delayed disbursement of funding from VA under Chapter 31 and Chapter 33.

EIT will permit a *Covered Individual* to attend and participate in the education process upon receipt of the *Certificate of Eligibility* for entitlement to educational assistance under Chapter 31 and Chapter 33.

Note: A *Certificate of Eligibility* can also include the following: *Statement of Benefits* obtained from the Department of Veterans Affairs website **or** *Form VAF 28-1905* for Chapter 31 authorization purposes ending on the earlier of either the date on which payment from VA is made to the institution or 90 days after the date the institution certified tuition and fees following the receipt of the *Certificate of Eligibility*.

ERIE INSTITUTE OF TECHNOLOGY EDUCATION ASSISTANCE (EITEA) GRANT

Erie Institute of Technology Education Assistance (EITEA) Grant is an Institutional Grant ranging from $100.00 to $4,000.00 per student per academic year. To be approved, the student must demonstrate unmet financial need, meet all eligibility requirements, and fall into at least one of the following required criteria categories:

(1) Have exhausted federal and state grants, student loans, parent loans, and alternative loans and still have unmet need or **(2)** Dependent student whose parent is denied a parent loan or are denied alternative loans and still have unmet need or **(3)** Independent student who has exhausted federal grants, state grants, and student loans and have been denied alternative loans and still have unmet need.

To apply, the student must meet with a financial aid advisor and complete the Erie Institute of Technology Education Assistance (EITEA) Grant application.

Programs

ERIE INSTITUTE OF TECHNOLOGY

Web Design & Social Media Marketing

Associate in Specialized Technology Degree

Full-Time Program • 66 Credits • 1500 Class Hours • 60 Weeks

Term	Course #	Course Name	Hours	Credits
First	**SS100**	Strategies for Success	30	2
	MGD127	Computer Applications for Designers	60	3
	MGD101	Graphic Design Fundamentals	60	3
	MGD128	Digital Imaging & Photography	90	3
	MGD121	Drawing Fundamentals	60	3
		Total	**300**	**14**
Second	**MGD136**	Web Page Fundamentals & UI Design	90	4
	MGD129	Introduction to Electronic Page Design	90	4
	MGD123	Typographic Design	60	3
	MGD106	Digital Illustration	60	3
		Total	**300**	**14**
Third	**MGD130**	Introduction to Web Design & Development	60	3
	GS105	Business Communication	60	3
	MGD131	Brand Design & Marketing	60	3
	MGD112	Web Graphics & Animation	60	3
	MGD125	Video Editing	60	3
		Total	**300**	**15**
Fourth	**MGD132**	Social Media Design & Marketing	60	3
	MGD133	Advanced Web Design & Development	60	3
	MGD134	Advanced Electronic Page Design	60	3
	MGD137	Intro to Content Management Systems & SEM	60	3
	MGD137	Professional Development for Designers	60	2
		Total	**300**	**14**
Fifth	**MGD118**	Design Portfolio	120	5
	MGD120	Externship	180	4
		Total	**300**	**9**
		Grand Total	**1500**	**66**

PROGRAM EDUCATIONAL OBJECTIVE

This program will prepare the student for an entry-level position as a Graphic Artist, Web Designer, Graphic Designer, Multimedia Designer, Social Media Designer or Social Media Manager.

Network and Database Professional

Associate in Specialized Technology Degree

Full-Time Program • 97 Credits • 1980 Class Hours • 84 Weeks

Term	Course #	Course Name	Hours	Credits
First	**SS100**	Strategies for Success	30	2
	MA100	Networking Mathematics	30	2
	CS119	Computer Essentials	60	3
	NDP102	Hardware I	60	3
	CS122	Legacy Operating Systems	60	3
	CS123	Networking Fundamentals	60	3
		Total	**300**	**16**
Second	**CS125**	Spreadsheet Management	60	3
	CS109	Microsoft Access	60	3
	CS113	TCP/IP	30	2
	CS117	Problem Solving	30	2
	CS131	MS Word	45	2
	CS126	Windows Professional	60	3
	CS106	Microsoft Outlook	15	1
		Total	**300**	**16**
Third	**CS133**	MS PowerPoint	30	2
	NDP101	Windows Server	60	3
	NDP090	Fundamentals of Database	60	3
	NDP103	Linux Fundamentals & Administration	90	4
	NDP104	Router Technology	60	3
		Totals	**300**	**15**
Fourth	**GS105**	Business Communication	60	3
	NDP105	Network Infrastructure	60	3
	NDP106	Hardware II	60	3
	NDP107	Routing and Switching	60	3
	NDP110	Querying Database	60	3
		Total	**300**	**15**
Fifth	**NDP109**	Exchange Server	60	3
	NDP114	Programming Database	60	3
	NDP111	Directory Services	60	3
	NDP112	Network Security	60	3
	NDP115	Remote Access	60	3
		Total	**300**	**15**
Sixth	**NDP108**	Administering Database Server	60	3
	NDP113	Network Design and Installation	60	3
	NDP116	Advanced Routing Configuration	60	3
	NDP117	Windows Script	60	3
	GS106	Professional Development	60	4
		Total	**300**	**16**
Seventh	**NDP118**	Externship	180	4
		Total	**180**	**4**
		Grand Total	**1980**	**97**

PROGRAM EDUCATIONAL OBJECTIVE

This program will prepare the student for an entry-level position as a Network Administrator, Database Administrator, Web Developer, Database Administrator, Network Technician, Network Engineer, Systems Administration Manager, Network Administration Engineer, Network Support Specialist and Help Desk representative

Business and Information Management

Diploma

Full-Time Program • 48 Credits • 990 Class Hours • 36 Weeks

Term	Course #	Course Name	Hours	Credits
First	**CS119**	Computer Essentials	60	3
	CS131	Microsoft Word	45	2
	CS135	Microsoft Excel	45	2
	CS123	Networking Fundamentals	60	3
	CS126	Windows Professional	60	3
	SS100	Strategies for Success	30	2
		Total	**300**	**15**
Second	**CS109**	Microsoft Access	60	3
	CS133	Microsoft PowerPoint	30	2
	CS106	Microsoft Outlook	15	1
	BIM101	Accounting	90	5
	BOP103	Human Resources	45	3
	GS106	Professional Development	60	4
		Total	**300**	**18**
Third	**GS105**	Business Communication	60	3
	BIM102	QuickBooks Pro	60	3
	GS107	Customer Service	45	3
	BIM103	Business Management	45	2
	BIM104	Externship	180	4
		Total	**390**	**15**
		Grand Total	**990**	**48**

PROGRAM EDUCATIONAL OBJECTIVE:

This program will prepare the graduate for entry-level positions in a wide variety of business and IT environments. Graduates will be qualified to seek employment in occupations that include Information Manager, Help Desk, Assistant, Administrative Manager, Purchasing Representative, Logistics Manager, Administrative Specialist and Office Coordinator.

Electronics Engineering Technology

Associate in Specialized Technology Degree

Full-Time Program • 122 Credits • 2400 Class Hours • 96 Weeks

Term	Course #	Course Name	Hours	Credits
First	**E 100**	Electricity Principles	90	6
	SS100	Strategies for Success	30	2
	E 102	DC / AC Components and Circuits Lab	120	4
	MA101	Algebra for Electronics	60	4
		Total	**300**	**16**
Second	**EE 301**	Active Components and Circuits	120	8
	EE 302	Active Components and Circuits Lab	120	4
	MA103	Trigonometry for Electronics	60	4
		Total	**300**	**16**
Third	**EE 501**	Digital Principles	90	6
	EE 502	Digital Principles Lab	90	3
	CS 129	Computer Fundamentals	60	4
	MA 301	Advanced Algebra	60	4
		Total	**300**	**17**
Fourth	**EE 403**	PLC I	120	8
	EE 404	PLC II	120	5
	GS106	Professional Development	60	4
		Total	**300**	**17**
Fifth	**E 501**	Design Concepts	90	6
	E 502	Design Concepts Lab	90	3
	CS107	Networking	60	3
	GS105	Business Communication	60	3
		Total	**300**	**15**
Sixth	**EE601**	Microprocessors	90	6
	EE602	Microprocessors Lab	60	2
	CS201	Windows Professional	60	3
	GS601	Computer Programming	90	4
		Total	**300**	**15**
Seventh	**EE701**	Industrial Electronics	90	6
	EE702	Industrial Electronics Lab	120	4
	EE703	Electronic Drafting	90	4
		Total	**300**	**14**
Eighth	**EE801**	Communication Circuits	90	6
	EE802	Communication Circuits Lab	120	4
	CE801	Externship	90	2
		Total	**300**	**12**
		Grand Total	**2400**	**122**

PROGRAM EDUCATIONAL OBJECTIVE

This program will prepare students for entry assignments in the Electronic Engineering Field. The in-depth science and mathematics is sufficient to qualify graduates for entry-level Engineering Technician positions in field service, research and development, broadcast, slot machine technicians, and other associated engineering functions.

Electronics Technician

Diploma

Full-Time Program • 68 Credit Hours • 1290 Class Hours • 48 Weeks

Term	Course #	Course Name	Hours	Credits
First	**E 100**	Electricity Principles	90	6
	SS100	Strategies for Success	30	2
	E 102	DC / AC Components and Circuits Lab	120	4
	MA101	Algebra for Electronics	60	4
		Total	**300**	**16**
Second	**EE 301**	Active Components and Circuits	120	8
	EE 302	Active Components and Circuits Lab	120	4
	MA103	Trigonometry for Electronics	60	4
		Total	**300**	**16**
Third	**EE 501**	Digital Principles	90	6
	EE 502	Digital Principles Lab	90	3
	CS 129	Computer Fundamentals	60	4
	MA 301	Advanced Algebra	60	4
		Total	**300**	**17**
Fourth	**E 403**	PLC I	120	8
	E 404	PLC II	120	5
	GS106	Professional Development	60	4
	ET401	Externship	90	2
		Total	**390**	**19**
		Grand Total	**1290**	**68**

PROGRAM EDUCATIONAL OBJECTIVE

This program will prepare the student for an entry-level position as an Electronics Technician, Electronics Test Technician, Electronics Installer, Slot Machine Technicians, or Electronics Repairer. Students will learn the installing, testing, troubleshooting, repairing and maintaining of electronic equipment and systems.

Medical Equipment Technician

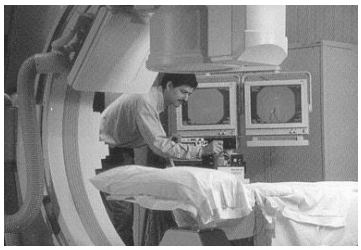
Associate in Specialized Technology Degree

Full-Time Program • 92 Credits • 1800 Class Hours • 72 Weeks

Term	Course #	Course Name	Hours	Credits
First	**E 100**	Electricity Principles	90	6
	SS100	Strategies for Success	30	2
	E 102	DC / AC Components and Circuits Lab	120	4
	MA101	Algebra for Electronics	60	4
		Total	**300**	**16**
Second	**EE 301**	Active Components and Circuits	120	8
	EE 302	Active Components and Circuits Lab	120	4
	MA103	Trigonometry for Electronics	60	4
		Total	**300**	**16**
Third	**EE 501**	Digital Principles	90	6
	EE 502	Digital Principles Lab	90	3
	CS 130	Computer Fundamentals	60	3
	MA 301	Advanced Algebra	60	4
		Total	**300**	**16**
Fourth	**BMT107**	Biomedical Instrumentation	90	6
	BMT108	Biomedical Instrumentation Lab	60	2
	BMT109	Anatomy & Physiology	60	4
	BMT110	Basic Medical Terminology	30	2
	GS106	Professional Development	60	4
		Total	**300**	**18**
Fifth	**BMT111**	Biomedical Systems	90	6
	BMT112	Biomedical Systems Lab	60	2
	CS107	Networking	60	3
	BMT113	Medical Equipment Safety	30	2
	GS105	Business Communication	60	3
		Total	**300**	**16**
Sixth	**CS117**	Problem Solving	30	2
	GS107	Customer Service	45	3
	BMT114	Externship	225	5
		Total	**300**	**10**
		Grand Total	**1800**	**92**

PROGRAM EDUCATIONAL OBJECTIVE

This program will prepare the student for an entry-level position as a Biomedical Equipment Technician, Medical Equipment Repairer, Biomedical Service Engineer, or Imaging Equipment Technician. Students will learn to install, test, troubleshoot, repair, and maintain medical equipment and systems.



CNC/Machinist Technician

Diploma

Full-Time Program • 44 Credits • 930 Class Hours • 36 Weeks

Term	Course #	Course Name	Hours	Credits
First	**CNC110**	Blueprint Reading / GDT	60	3
	CNC111	Practical Dimensional Inspection Fundamentals	60	3
	CNC112	Machining I	90	3
	SS100	Strategies for Success	30	2
	MW104	Machinist Mathematics	60	4
		Total	**300**	**15**
Second	**CNC113**	Machining II	180	6
	CNC114	Introduction to CNC Machining	60	4
	JDS100	Job Seeking Development	30	2
	CS101	Practical Computer Skills	30	2
		Total	**300**	**14**
Third	**CNC115**	CNC Machining I	120	5
	CNC116	CNC Machining II	150	6
	CNC117	CNC Machining III	60	4
		Total	**330**	**15**
		Grand Total	**930**	**44**

EDUCATIONAL OBJECTIVE

This program will prepare the student for an entry-level position as a machinist, machine set-up operator, CNC machinist and CNC machine set-up operators.

Industrial Maintenance and Mechatronics

Diploma

Full-Time Program • 45 Credits • 960 Class Hours • 36 Weeks

Term	Course #	Course Name	Hours	Credits
First	**MNT101**	Industrial Mathematics	30	2
	MNT107	AC/DC Fundamentals	60	3
	MNT103	Practical Dimensional Inspection	30	1
	MNT104	OSHA and Safety	30	2
	MNT105	Fluid Power	90	4
	MNT106	Computer Concepts	30	1
	SS100	Strategies for Success	30	2
		Total	**300**	**15**
Second	**MNT102**	Blueprint Reading	60	3
	MNT112	Electric Motor Controls	90	4
	MNT109	Mechanical Drives	60	3
	MNT110	Welding Concepts	60	3
	MNT111	Professional Development	30	2
		Total	**300**	**15**
Third	**MNT108**	Machining Operations	90	4
	MNT113	Programmable Logic Controllers	60	3
	MNT114	Preventative Maintenance Applications	60	3
	MNT115	HVAC Concepts	60	3
	MNT116	Externship	90	2
		Total	**360**	**15**
		Grand Total	**960**	**45**

EDUCATIONAL OBJECTIVE

This program will prepare the student for an entry-level position as a Maintenance Mechanic, Maintenance Technician, Building Maintenance Technician, and Plant Engineering Assistant.

Heating, Ventilation & Air Conditioning / Refrigeration Technology

Diploma

Full-Time Program • 62 Credits • 1200 Class Hours • 48 Weeks

Term	Course #	Course Name	Hours	Credits
First	**RHV120**	Refrigeration Theory / Lab	150	6
	RHV121	Electricity And Electronics for HVAC/R	30	2
	RHV122	HVAC/R Customer Service	60	4
	SS100	Strategies for Success	30	2
	CS101	Practical Computer Skills	30	2
		Total	**300**	**16**
Second	**RHV123**	Commercial Refrigeration Theory / Lab	150	6
	RHV124	Hydronic Heating	30	2
	RHV125	Environmental Engineering	60	4
	RHV126	Mathematics for HVAC/R	30	2
	JDS 100	Job Seeking Development	30	2
		Total	**300**	**16**
Third	**RHV127**	HVAC Theory / Lab	150	6
	RHV128	Estimating	30	2
	RHV129	HVAC/R Control Systems	90	6
	RHV130	Green Technologies in HVAC/R	30	2
		Total	**300**	**16**
Fourth	**RHV131**	Digital Electronics for HVAC/R	90	6
	RHV132	Troubleshooting HVAC/R Systems and Equipment	120	6
	RHVEXT	Externship	90	2
		Total	**300**	**14**
		Grand Total	**1200**	**62**

EDUCATIONAL OBJECTIVE

Graduates will be qualified for entry level employment in the HVAC/R field in positions which include HVAC/R Technician, HVAC Service Technician and Refrigeration Technician.

Welding Technology

Diploma

Full-Time Program • 66 Credits • 1200 Class Hours • 48 Weeks

Term	Course #	Course Name	Hours	Credits
First	**SS100**	Strategies for Success	30	2
	MW101	Mathematics for Welding I	60	4
	WLD101	Introduction to Arc Welding Processes	60	3
	WLD106	Blueprint Reading	30	2
	WLD126	Cutting Processes	60	3
	WLD127	Safety and Shop Procedures	60	2
		Total	**300**	**16**
Second	**MW102**	Mathematics for Welding II	60	4
	WLD108	AWS D1.1 Structural Steel Welding	90	5
	WLD110	Gas Metal Arc Welding (GMAW)	60	3
	WLD132	Welding Inspection Fundamentals	30	2
	WLD125	Welding Metallurgy	60	4
		Total	**300**	**18**
Third	**MW103**	Mathematics for Welding III	60	4
	WLD109	Gas Tungsten Arc Welding (GTAW)	60	3
	WLD119	Pipe Code and Welding Techniques	60	3
	WLD124	Structural Steel and Pipe Drawings and Layouts	60	3
	WLD128	Piping I (GMAWP)	60	3
		Total	**300**	**16**
Fourth	**GS106**	Professional Development	60	4
	WLD121	Fabrication Project	60	3
	WLD129	Piping II (SMAWP)	60	3
	WLD130	Piping III (GTAWP)	60	3
	WLD131	AWS D1.1 Flux Core Arc Welding (FCAW)	60	3
		Total	**300**	**16**
		Grand Total	**1200**	**66**

EDUCATIONAL OBJECTIVE

Upon completion of the Welding Technology program, students will be qualified for entry- level employment in the welding field in positions which include Welder, Welding Specialist, Welding Technologist or Welding Engineer.

Electrician

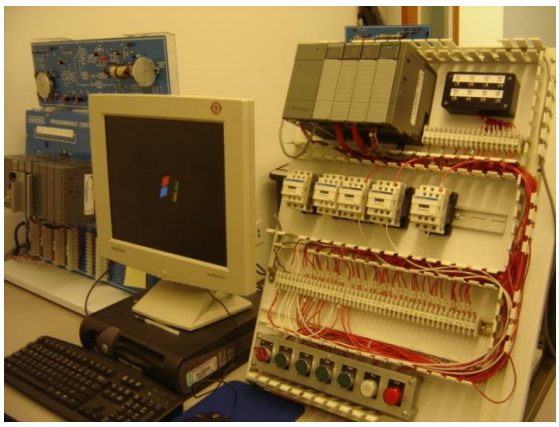
Diploma

Full-Time Program • 80 Credits • 1500 Class Hours • 60 Weeks

Term	Course #	Course Name	Hours	Credits
First	**SS100**	Strategies for Success	30	2
	ELE104	Residential Circuit Design	90	5
	ELE105	Residential Construction	90	4
	ELE120	Ohm's Law & Basic Electric Circuits	60	3
	ELE121	Introduction to Electricity	30	2
		Total	**300**	**16**
Second	**ELE122**	Residential Services and Special Systems	90	4
	ELE123	Blueprints and Symbols	90	5
	ELE124	Commercial Circuits & Distribution	60	3
	ELE125	Commercial Construction	60	3
		Total	**300**	**15**
Third	**ELE126**	AC Essentials of Electricity and Electronics	60	4
	MW100	Technical Mathematics	60	4
	ELE111	AC/DC Motors and Generators	90	5
	ELE127	Single / Three Phase Transformers	90	4
		Total	**300**	**17**
Fourth	**ELE115**	Three Phase Motors	90	5
	ELE113	Low Voltage Motor Control Circuits	90	5
	ELE117	Industrial Controls	90	4
	JDS100	Job Seeking Development	30	2
		Total	**300**	**16**
Fifth	**CS119**	Computer Essentials	60	3
	ELE116	Programmable Logic Controllers I	60	3
	ELE118	Programmable Logic Controllers II	90	4
	ELE119	Cost Estimating and Technical Writing	90	6
		Total	**300**	**16**
		Grand Total	**1500**	**80**

EDUCATIONAL OBJECTIVE

This program will prepare the student for an entry-level position as an Electrician, Electricians Assistant, Maintenance Electrician, Residential Electrician, Commercial Electrician and Industrial Electrician.



Automotive Body Technician

Diploma

Full-Time Program • 60 Credits • 1200 Class Hours • 48 Weeks

Term	Course #	Course Name	Hours	Credits
First	**ABT 113**	Basic Auto Body Repair I	75	3
	ABT 114	Basic Auto Body Repair II	75	3
	SS 100	Strategies for Success	30	2
	ABT115	Automotive Mathematics	60	4
	ABT 116	Automotive Welding I	60	3
		Total	**300**	**15**
Second	**ABT 123**	Advanced Auto Body Repair I	75	3
	ABT 124	Advanced Auto Body Repair II	75	3
	CS 136	Computer Principles	30	2
	GS 104	Business Communications Essentials	60	4
	ABT 125	Automotive Welding II	60	3
		Total	**300**	**15**
Third	**ABT133**	Auto Surface Preparation I	90	4
	ABT134	Auto Surface Preparation II	90	4
	GS 110	Customer Service Essentials	60	3
	GS 106	Professional Development	60	4
		Total	**300**	**15**
Fourth	**ABT 143**	Auto Painting and Refinishing I	120	6
	ABT 144	Auto Painting and Refinishing II	180	9
		Total	**300**	**15**
		Grand Total	**1200**	**60**

EDUCATIONAL OBJECTIVE

Graduates will be qualified for entry level employment in the automotive field in positions which include Auto Body Technician, Automotive Collision Technician, Automotive Painter and Automotive Repair Estimator.

Medical Billing and Coding

Diploma

Full-Time Program • 42 Credits • 810 Class Hours • 36 Weeks

Term	Course #	Course Name	Hours	Credits
First	MBC 110	Career Success Strategies	45	3
	MBC 115	Medical Office Procedures	45	2
	MBC 120	Medical Terminology Essentials	45	2
	MBC 125	Anatomy and Physiology Essentials I	45	2
	MBC 130	Insurance Procedures I	45	2
	MBC 135	Keyboarding and Word Processing	45	3
		Total	**270**	**14**
Second	MBC 140	Anatomy and Physiology Essentials II	45	2
	MBC 145	Diagnostic Coding	45	2
	MBC 150	Insurance Procedures II	45	2
	MBC 155	Procedural Coding	45	2
	MBC 160	Electronic Health Records	45	3
	MBC 165	Medical Law and Ethics	45	3
		Total	**270**	**14**
Third	MBC 170	Hospital Billing and Coding	45	2
	MBC 175	Career and Professional Development	45	3
	MBC 180	Computerized Medical Office Management	45	3
	MBC 185	Introduction to Health Information Management	45	2
	MBC 190	Advanced Medical Coding	45	2
	MBC 195	Disease Process	45	2
		Total	**270**	**14**

Educational Objective

The Medical Billing and Coding program is designed to provide the student with the knowledge and hands-on skills necessary to build a successful career as an entry-level medical professional within the healthcare community. The program prepares the student to work in the front office, the medical records department, the medical billing and coding department as well as in a variety of health care settings.

Phlebotomy Technician

Diploma

Full-Time Program • 27 Credits • 540 Class Hours • 24 Weeks

Term	Course #	Course Name	Hours	Credits
First	MBC 110	Career Success Strategies	45	3
	MBC 115	Medical Office Procedures	45	2
	MBC 120	Medical Terminology Essentials	45	2
	MBC 125	Anatomy and Physiology Essentials I	45	2
	MBC 165	Medical Law and Ethics	45	2
	PT 110	Phlebotomy I	45	3
		Total	**270**	**14**
Second	MBC 140	Anatomy and Physiology Essentials II	45	2
	MBC 175	Career and Professional Development	45	3
	PT 115	Phlebotomy II	45	3
	PT 120	Phlebotomy III	45	3
	PT 125	Phlebotomy Externship	90	2
		Total	**270**	**13**

Educational Objective

The Phlebotomy Technician program is designed to provide the student with the knowledge and hands-on skills necessary to build a successful career as a competent entry-level phlebotomist within the healthcare community. The program prepares the student to work in hospitals, laboratories, physicians' offices, clinics, blood banks, and insurance companies.

Course Descriptions

Erie Institute of Technology's programs are measured in length by semester credit hours and by clock hours. One credit hour is awarded for 15 hours of lecture or theory class, 30 hours of laboratory experience, or 45 hours of externship. In addition, work outside the class-room (homework, etc.) is required for all programs offered at the school. A standard class hour is 50 minutes.

Web Design & Social Media Marketing Course Descriptions

SS100
Strategies for Success
This course presents students with a framework for examining their lives from a self-discovery perspective. Students will discover their own learning styles, strengths and weaknesses, and learn to effectively set goals and practice academic and life skills..

MGD127
Computer Applications for Designers
Presents an introduction to the core concepts of the Microsoft Office Suite including Word and Power-Point; and basic usage and concepts of proper keyboarding techniques utilizing alphabetic and numeric keys, symbols, and the numeric keypad.

MGD101
Graphic Design Fundamentals
This introductory level course presents the fundamental elements of design, basic principles of layout and composition, and color theory. Also covered will be the use of type and images to enhance design. In addition to theory presentation, this course utilizes a "hands on" approach to create specific projects that emphasize the various concepts discussed.

MGD128
Digital Imaging & Photography
This course presents in-depth conceptual information with concise steps to help the student learn to create, manipulate and enhance
digital images primarily through Adobe Photoshop.
Pre or Co-requisites: *MGD101*

MGD121
Drawing Fundamentals
This course introduces the student to the fundamental techniques of drawing. Topics covered will include form, proportion, perspective, and shading. Students will use the techniques they learn to produce artwork under set project guidelines.

MGD136
Web Page Fundamentals & UI Design
This course is designed to give the students a firm understanding of the purpose of a website and how to create an effective user-experience and website layout. Students will learn the process of creating a website which will include creating sitemaps, wireframes, user-interface designs and prototypes.
Pre or Co-requisites: *MGD101, MGD106, MGD123, MGD128*

MGD129
Introduction to Electronic Page Design
This course presents the concepts of page publishing software and the skills needed to create and print high quality documents simply and reliably. Students will utilize the professional page layout program Adobe InDesign CC to produce visual communications that are both powerfully effective and highly creative.
Pre or Co-requisites: *MGD101 and MGD123*

MGD123
Typographic Design
This course looks at how type and letterforms affect graphic design and communication. Students will develop the necessary skills to convey information in a structured, legible and expressive manner. Assignments will investigate historical perspectives, typeface identification, structure and measurement, text as form, and compositional fundamentals relevant to using display and body text in computer-based typography.
Pre/co-requisite: *MGD106*

MGD106
Digital Illustration
This course is designed to provide basic and some advanced techniques of creating and editing vector graphics in Adobe Illustrator. Students will learn when to use vector art, how to convert hand drawn images to vector art, create an illustration with layering of shapes and the mixture of typography with vector art. Students will also create an original character and a model sheet, including multiple poses and expressions. They will use layers to create complex illustrations, use drawing tools, create photo-realistic gradient meshes, create graphs, learn to create layer and clipping masks, and use filters to add depth and texture to illustrations.
Prerequisites: *MGD101*

MGD130
Introduction to Web Design & Development
This course is designed to teach students web page creation. Students will gain experience developing web pages in a Dreamweaver interface (GUI) editor and text editor. Students also will learn how to use CSS (cascading style sheets) and study the basics of HTML, and DOM (document object model). After completion of the course, students will be able to create simple web pages containing text, graphics, hyperlinks, tables and forms.
Pre or Co-requisites: *MGD136*

GS105
Business Communication
Presents the basic concepts of writing and effective speaking techniques. Topics include the writing process; writing memos; e-mails; business letters; speech preparation; communications with employers; formal presentations and the use of graphic aids.

MGD131
Brand Design & Marketing
This course presents how design can create value for clients as well as for society in general. Students will learn basic models of strategic and client-based design development. They will design and create processes to communicate brands and branding as well as identify usages of design as a strategic tool in product development, market communication and company growth. Students will also design various types of logos, corporate stationery, and a basic style guide.
Pre or Co-requisites: *MGD106, MGD123, MGD128*

MGD112
Web Graphics & Animation
This course will provide students with the knowledge and skills to create animations using Adobe Flash Professional. Students will learn about vector graphics and use drawing and text tools to create objects. Students will learn how to animate objects, use sound, and publish a Flash movie.
Prerequisite: *MGD136*

MGD125
Video Editing
In this course, students will add effects to unedited video and still images to create dynamic and appealing visual experiences. Students will learn basic elements of importing video and images into Adobe After Effects and Adobe Premier software. Once the basics are completed, students will use the software programs to adjust colors, add text, work with audio, create effects, and composite extra visual elements such as motion graphics.
Pre or Co-requisites: *MGD106, MGD128*

MGD132
Social Media Design & Marketing
Students will learn the skills necessary to design, create, and send Social Media Marketing materials through a variety of electronic media. Students will use their repertoire of software skills to create compelling promotional packages showcasing their talents and abilities.
Pre or Co-requisites: *MGD106, MGD128, MGD131, MGD129 or MGD134, MGD137*

MGD133
Advanced Web Design & Development
This course teaches technologies to enhance web sites. Students will learn the structure of coding for web development. Students will gain experience in creating advanced web solutions. Upon completion of the course, the student will have a firm understanding of the nature and use of web technologies in the working environment and the techniques and terminology of scripting languages,
including jQuery.
Pre or Co-requisite: ***MGD130***

MGD134
Advanced Electronic Page Design
This course is designed to provide students with in-depth knowledge of industry-standard page layout software. Utilizing Adobe InDesign, students will learn how to design and create multi-page projects containing complex text and graphics, set advanced components for producing color

documents, and apply interactivity to an InDesign document. Students will learn to use several types of in-house printers, prepare files ready for output by high-end commercial printers, and become aware of the production demands and costs to create published work.
Pre or Co-requisites: *MGD101 and MGD129*

MGD137
Intro to Content Management Systems & SEM
This course will teach students how to install and manage a back-end interface. Students will learn to edit, modify, and publish content, as well as work with many plugins and website theme options. In addition, students will learn techniques to optimize a website's content and images for search engine and social media marketing.
Pre or Co-requisite: *MGD130, MGD133, MGD132*

MGD135
Professional Development for Designers
Presents the student with skills and abilities needed to function effectively in the business world and his/her personal life. Topics will include organizational skills, time management, attitude, public and client relations, goal-setting, and preparing for a job.
Pre or Co-requisites: *MGD131 and MGD132*

MGD118
Design Portfolio
This course requires the creation of a student design portfolio which will showcase the breadth of the student's design abilities. The course provides classroom hours for students to revise projects and generate new work. While students are expected to work independently, classroom instructors are available to oversee and guide students through completion of the portfolio.

MGD120
Externship
This course will enable students to apply their knowledge in a Business or Corporate atmosphere in a practical setting. This course will provide the student with the challenging and exciting opportunity to apply skills under supervision in an on-the-job setting. Each student is required to complete an externship assignment of 180 hours upon successful completion of classroom training. The externship site supervisor will be evaluating personal qualities as well as classroom skills. The externship assignment must be satisfactorily completed before a degree is awarded.

Network and Database Professional Course Descriptions

SS100
Strategies for Success
This course presents students with a framework for examining their lives from a self-discovery perspective. Students will discover their own learning styles, strengths and weaknesses, learn to set goals effectively and practice academic and life skills

MA100
Networking Mathematics
This course is designed to provide the student with the mathematical skills needed to be successful in the field of information technology using practical problems taken directly from industry.

CS119
Computer Essentials
Students will become competent in the basic operation of the Windows operating system, the EIT network, email basics, and effective use of the internet.

CS131
MS Word
This course shows students how to use Microsoft Word to create, format, save, and print documents. Students will learn about margins, headers and footers, tables, mail merge documents, images, and forms.
Prerequisite: *CS119.*

CS133
MS PowerPoint
Students will learn to create presentations, create custom backgrounds, color schemes, and animations, and give a speech with a PowerPoint presentation.
Prerequisite: *CS119.*

NDP090
Fundamentals of Database
This course presents the basics of relational databases and SQL. Students will learn to access and define the data in a database using SQL. Students will be comfortable moving raw data to related tables in a database, and writing simple queries to a relational database.
Prerequisite: *CS119.*

CS122
Legacy Operating Systems
This course introduces students to Operating Systems that, although not a primary focus, are still seen in many IT departments throughout the world today. It covers operating systems from both an end-user and administrative standpoint.
Prerequisite: *CS119.*

CS123
Networking Fundamentals
This course will provide the student with the key concepts of data communications. It will give the student an understanding of how data is transferred over Local and Wide Area Networks. The course will provide the student with the key knowledge to monitor and troubleshoot networks.
Prerequisite: *CS119.*

CS109
Microsoft Access
Presents an introduction to the core concepts of Microsoft Access and the skill areas of planning and creating a database, creating tables and forms, and entering and querying data. Also provides an introduction to creating and enhancing a report, working with queries, integrating data, modifying and enhancing tables and forms, and working with Access tools.

CS113
TCP/IP
Students will become familiar with Transmission Control Protocol / Internet Protocol, its features, architecture, installation procedures, network support, and maintenance of WINS server, DNS, managing the network using SNMP, & securing the network.
Prerequisite: *CS119.*

CS117
Problem Solving
Presents topics such as decision making, thinking outside the box, team decision making, and creating positive change in the workplace. This course enhances the opportunity for career success by targeting fundamental skills needed in the student's chosen field.

CS125
Spreadsheet Management
This course presents the core concepts of Microsoft Excel. Students will learn to create and format spreadsheets, use common functions/formulas, and import/export data to and from Microsoft Excel and other Office applications. In addition, this course provides an introduction to more advanced topics including pivot tables and charts.
Prerequisites: *CS119 and knowledge of Microsoft Office.*

CS126
Windows Professional
Presents an introduction to the Microsoft Windows Professional operating system and prepares the student with the knowledge and skills required to install, configure and troubleshoot Windows and its components efficiently.
Prerequisite: *CS119.*

GS105
Business Communication
Presents the basic concepts of technical writing and effective speaking techniques. Topics include the writing process; writing memos; e-mails; business letters; writing formal reports; speech preparation; communications with employers; formal presentations and the use of graphic aids.

NDP101
Windows Server
This course provides an introduction to the core concepts of the Microsoft Windows Server operating system and prepares the student to install, configure and troubleshoot Windows Server and its components efficiently.
Prerequisites: *CS119 and CS126.*

NDP102
Hardware I
This course will provide the student with a comprehensive knowledge of computer hardware, and peripherals, including desktop and notebook models. The student will learn to identify each component of the PC and their specifications.
Prerequisites: *CS119 and CS126.*

NDP103
LINUX Fundamentals and Administration
This course presents the student with fundamental knowledge of the Linux operating system including a historical perspective, administration of the system from the command line, installation, user management, server setup, networking, and the role that Linux plays in the business world.
Prerequisite: *CS119.*

NDP104
Router Technology
This course presents fundamental knowledge of CISCO technologies and routing configuration. Information provided will allow the student to understand the theory behind routers, router interfaces, router protocols and the role routers play in a network topology.
Prerequisites: *CS119 and CS113.*

CS106
Microsoft Outlook
Presents the basic operation of Microsoft Outlook and the integration of desktop applications in organizational and communications tasks.

NDP105
Network Infrastructure
This course teaches students to install configure, manage, and support a network infrastructure using Microsoft Windows Server products.
Prerequisites: *CS119 and CS113.*

NDP106
Hardware 2
This course presents the three fundamental printing technologies of dot-matrix, inkjet, and laser printing, as well as diagnostic and troubleshooting techniques for each. This course utilizes a "hands on" approach to teach printer setup and installation of local and network printers, as well as the skills necessary to identify & repair printing problems, & perform preventative maintenance techniques necessary to support printers.
Prerequisite: *NDP102.*

NDP107
Routing and Switching
Presents the basics of network routing and switching. Information provided will allow students to design, build and better manage a more configurable network.
Prerequisites: *CS119 and NDP104.*

NDP110
Querying Database
This course presents complex SQL queries in a relational database. Students will be able to use several types of Joins, aggregate functions and advanced sub queries as well as generate simple reports. Students will develop the knowledge and skills you need to install, configure, administer, trouble-shoot, and query the client/server database management system of Microsoft SQL Server.
Prerequisite: ***NDP090***

NDP109
Exchange Server
Presents the knowledge and skills necessary to install, configure, and administer Microsoft Exchange for companies with multiple physical locations, mixed client connection protocols and Internet messaging connectivity.

NDP114
Programming Database
This course provides students with the technical skills required to program a database using advanced SQL commands. Students will be comfortable creating variables, Cursors, Functions and Stored Procedures to dynamically maintain the database.
Prerequisites: *CS119 and NDP110.*

NDP111
Directory Services
This course will provide the student with the knowledge and skills required to install, configure, and administer Microsoft Windows Active Directory services. It also focuses on implementing Group Policy and performing the Group Policy-related tasks that are required to centrally manage users and computers.

NDP112
Network Security
This course teaches students how to secure networks from unauthorized activity. Students learn about establishing an effective security policy and identifying and preventing different types of hacker activities. Students will also learn about authentication procedures, encryption standards and implementations, ports and protocols that hackers manipulate, proactive detection, and reporting methods.
Prerequisites: *CS119 and CS126.*

NDP113
Network Design and Installation
This course provides students with a basic understanding of network technology, with a focus on network hardware.
Prerequisites: *CS119, NDP105, and NDP111.*

NDP108
Administering Database Server
This course teaches students to install, configure, administer, and troubleshoot the client-server database management system of Microsoft SQL Server.
Prerequisites: *CS119 and CS127.*

NDP115
Remote Access
In this course, students learn how to build, configure and troubleshoot a remote access network to interconnect central sites to branch offices and home offices. Students also learn how to control access to the central site, as well as to maximize bandwidth utilization over the remote links.
Prerequisites*: CS119 and NDP101.*

NDP116
Advanced Routing Configuration
Prepares students with in-depth information on routing protocols and network segmentation. Enables them to build and manage scalable networks for ease of future expandability.
Prerequisites: *CS119 and NDP107.*

NDP117
Windows Script
This course will provide the student with the key concepts of the Windows scripting language. The student will understand Windows scripting technologies and apply them to Administration tasks.
Prerequisites: *CS119 and CS126.*

GS106
Professional Development
Presents students with skills and abilities needed to function effectively in their career field and the business world. Topics will include organizational skills, time management, attitude, public relations, goal setting and preparing for a job in the student's chosen field.

NDP118
Externship - NDP
This course will provide the student with the challenging and exciting opportunity to apply skills under supervision in an on-the-job setting. Each student is required to complete an externship assignment upon successful completion of classroom training. The externship site supervisor will be evaluating personal qualities as well as classroom skills. The externship assignment must be satisfactorily completed before a degree is awarded. ***Prerequisites:*** *All courses*

Business and Information Management Course Descriptions

SS100
Strategies for Success
This course presents students with a framework for examining their lives from a self-discovery perspective. Students will discover their own learning styles, strengths and weaknesses, learn to set goals effectively and practice academic and life skills.

CS119
Computer Essentials
Students will become competent in the basic operation of the Windows operating system, the EIT network, e-mail basics, and effective use of the internet.

CS131
Microsoft Word
This course shows students how to use Word to create, format, save, and print documents. Students will learn about margins, headers and footers, tables, mail merge documents, images, and forms.

CS135
Microsoft Excel
Presents the basic concepts and operation of Microsoft Excel. Students will become proficient users of Excel and learn the requirements for certification.

BIM101
Accounting
This course covers the theory and practice of measuring and interpreting financial data. Basic concepts, principles, and procedures are applied to the following topics: operating cycle, accruals and deferrals, financial statements, internal controls, receivables, inventory, fixed assets, and liabilities.

CS106
Microsoft Outlook
Presents the basic operation of Outlook and using Outlook in the integration of desktop applications and in organizational and communications tasks.

CS109
Microsoft Access
Presents an introduction to the core concepts of Microsoft Access and the skill areas of planning and creating a database, creating tables and forms, and entering and querying data. Also provides an introduction to creating and enhancing a report, working with queries, integrating data, modifying and enhancing tables and forms, and working with Access tools.

CS123
Networking Fundamentals
This course will provide the student with the key concepts of data communications. It will give the student an understanding of how data is transferred over Local and Wide Area Networks. The course will provide the student with the key knowledge to monitor and troubleshoot networks.

CS126
Windows Professional
Presents an introduction to the Microsoft Windows Professional operating system and prepares the student with the knowledge and skills required to install, configure and troubleshoot Windows and its components efficiently.

CS133
MS PowerPoint
Students will learn to create presentations, create custom backgrounds, color schemes, and animations, and give a speech with a PowerPoint backup.

BOP103
Human Resources
This course is an overview of the human resource management field. Emphasis is placed in the areas of staffing, training and developing human potential, compensation, benefits, and performance management. The legal framework for equal employment opportunity is also covered along with affirmative action.

GS106
Professional Development
Presents students with skills and abilities needed to function effectively in their career field and the business world. Topics will include organizational skills, time management, attitude, public relations, goal setting and preparing for a job in the student's chosen field.

BIM102
QuickBooks Pro
Presents basic concepts of QuickBooks for accounting, including setting up a company, creating and customizing company lists, setting up inventory, processing sales, invoicing, and payments, setting up Internet connections and using online services. Students will learn to customize forms, work with credit card transactions, reconcile bank statements, create and customize reports and graphs, track and pay sales tax, manage payroll, complete job estimates, track time and costs and create customized letters and forms.

BIM103
Business Management
Presents basic concepts of management including; Introduction to Management, Planning, Organizing, Leading, and Controlling all in a management role.

GS105
Business Communication
Presents the basic concepts of technical writing and effective speaking techniques. Topics include the writing process; writing memos; e-mails; business letters; writing formal reports; speech preparation; communications with employers; formal presentations and the use of graphic aids.

GS107
Customer Service
Presents the foundations for working effectively with both internal and external customers to include customer behavior, use of technology, diversity in customers, how to encourage customer loyalty, effective listening, and verbal versus non-verbal communication.

BIM104
Externship
BIM
This externship training will provide the student with a challenging and exciting opportunity to apply skills under supervision in an on-the-job setting in the business information management field. The externship site supervisor will be evaluating personal qualities as well as classroom skills.

Electronic Engineering Technology Course Descriptions

SS100
Strategies for Success
This course presents students with a framework for examining their lives from a self-discovery perspective. Students will discover their own learning styles, strengths and weaknesses, learn to set goals effectively and practice academic and life skills.

E100
Electricity Principles
Presents the basic concepts and application of DC and AC electricity including detailed discussion of Ohm's Law; series circuits; parallel circuits; series-parallel circuits; voltage and current dividers; DC and AC motors; conductors and insulators; resistors; capacitors; inductors; batteries; circuit, and analysis.

E102
DC / AC Components and Circuits Lab
In the lab environment the following will be presented: basic concepts and application of DC and AC electricity including detailed discussion of Ohm's Law; series circuits; parallel circuits; series-parallel circuits; voltage and current dividers; DC and AC motors; conductors and insulators; resistors; capacitors; inductors; batteries; circuit, and analysis.

MA101
Algebra for Electronics
Reviews basic arithmetic concepts and operations of fractions; decimals; exponents and roots. Presents basic algebra concepts such as signed numbers; polynomials; factoring; working with formulas; solving equations; graphs and linear functions. Provides practical applications in electronics such as Ohm's law and problems dealing with DC circuits to motivate learning and reinforce concepts presented.

EE301/ EE302
Active Components and Circuits/Lab
Presents the basic concepts of semiconductor theory, including detailed discussions of PN junctions; diode circuits; bipolar transistors; transistor biasing circuits; AC equivalent circuits for bipolar transistor analysis; field effect transistors; SCRs, UJTs, TRIACS; integrated circuits.
Prerequisites: *E100, E102*

MA103
Trigonometry for Electronics
Presents basic concepts and operations of trigonometric functions including trigonometric ratios; right triangles; trigonometric identities; radian and degree measurement; vectors; polar and rectangular forms; graphs of trigonometric functions. Provides applications to electronics including alternating current; phase angles; working with series and parallel AC circuits.
Prerequisite: *MA101*

EE501/ EE502
Digital Principles/Lab
Presents detailed analysis involving basic logic gates; integrated logic families; Boolean algebra; flip-flops and latches; numbering systems and codes; counters and registers; arithmetic circuits; memory devices; digital displays.
Prerequisites: *E100, E102, EE301, EE302*

CS129
Computer Fundamentals
Presents basic usage and concepts including proper keyboarding techniques utilizing alphabetic and numeric keys, symbols, and the numeric keypad. Students will also become competent in the basic operation of the Windows operating system. Plus an introduction to the core concepts of the Microsoft Office Suite including Word and Excel are covered.

MA301
Advanced Algebra
Presents advanced algebra topics such as solving simultaneous equations; determinants; fractional exponents; complex numbers; common and natural logarithms. Provides practical electronic application topics including binary; octal; hexadecimal number systems; and basic Boolean algebra.
Prerequisites: *MA101, MA103*

EE403 / EE404
PLC I & II
Presents the basics of programmable controllers to include a variety of input and output modules; timers and counters and programming techniques. The basics of industrial automated production equipment and robotics systems are also covered.
Prerequisites: *E100, E102, EE301, EE302, EE501, EE502*

GS106
Professional Development
Presents students with skills and abilities needed to function effectively in their career field and the business world. Topics will include organizational skills, time management, attitude, public relations, goal setting and preparing for a job in the student's chosen field.

E501/E502
Design Concepts/Lab
Presents detailed analysis and design concepts involving small-signal amplifiers; power amplifiers; frequency effects; negative and positive feedback circuits; operational amplifier circuits; integrated circuits. Includes in-depth mathematical analysis of circuits involving network theorems.
Prerequisites: *E100, E102, EE301, EE302, EE501, EE502*

CS107
Networking
Presents an overview of networking concepts and their implementation in Windows. The student will understand and identify the tasks involved in supporting Windows networks.

GS105
Business Communication
Presents the basic concepts of technical writing and effective speaking techniques. Topics include the writing process; writing memos; e-mails; business letters; writing formal reports; speech preparation; communications with employers; formal presentations and the use of graphic aids.

EE601/EE602
Microprocessors/Lab
Basic microprocessor concepts and functions; 8086 family, 6800 family, and 68000 family of microprocessors; binary number systems; arithmetic methods; instruction sets; microprocessor architecture; low level programming; assembly level programming; timing and control functions; bus structures; memory and I/O relationships; microprocessor design applications.
Prerequisites: *E100, E102, EE301, EE302, EE501, EE502*

CS201
Windows Professional
Presents the concepts and skills necessary to install and configure Microsoft Windows Professional on stand-alone and client computers that are part of a workgroup or domain.

GS601
Computer Programming
Presents the basic concepts of computer programming and applications involving BASIC programming language and C++ programming language. Concepts involve decision making; looping instructions; functions; arrays; characters and strings; and file operations. Concentration on using computer applications to meet the business and workplace needs of the technician.

EE701/ EE702
Industrial Electronics/Lab
Presents the basic concepts of industrial applications including AC and DC motors; measurement instrumentation; open and closed loop control systems; motor speed controls; process control methods; sequential controls; programmable controllers; robotics.
Prerequisites: *E100, E102, EE301, EE302, EE501, EE502*

EE703
Electronic Drafting
Presents the basic concepts of drafting principles associated with electronics including lettering; device symbols; basic drafting techniques; flow and logic diagrams; schematic diagrams; industrial control diagrams.

EE801/ EE802
Communication Circuits/Lab
Presents basic concepts of AM and FM communications including principles of amplitude and frequency modulation; AM and FM transmitters and receivers; CB transceivers; fundamentals of television; electromagnetic propagation and antennas; microwave communications; basics of telecommunications; fundamentals of laser technology; principles of fiber optics.
Prerequisites: *E100, E102, EE301, EE302, EE501, EE502*

CE801
Externship
EET
This externship training will provide the student with a challenging and exciting opportunity to apply skills under supervision in an on-the-job setting in the electronics field. The externship site supervisor will be evaluating personal qualities as well as classroom skills.

Electronics Technician Course Descriptions

SS100
Strategies for Success
This course presents students with a framework for examining their lives from a self-discovery perspective. Students will discover their own learning styles, strengths and weaknesses, learn to set goals effectively and practice academic and life skills.

E100
Electricity Principles
Presents the basic concepts and application of DC and AC electricity including detailed discussion of Ohm's Law; series circuits; parallel circuits; series-parallel circuits; voltage and current dividers; DC and AC motors; conductors and insulators; resistors; capacitors; inductors; batteries; circuit, and analysis.

E102
DC / AC Components and Circuits Lab
In the lab environment the following will be presented: basic concepts and application of DC and AC electricity including detailed discussion of Ohm's Law; series circuits; parallel circuits; series-parallel circuits; voltage and current dividers; DC and AC motors; conductors and insulators; resistors; capacitors; inductors; batteries; circuit, and analysis.

MA101
Algebra for Electronics
Reviews basic arithmetic concepts and operations of fractions; decimals; exponents and roots. Presents basic algebra concepts such as signed numbers; polynomials; factoring; working with formulas; solving equations; graphs and linear functions. Provides practical applications in electronics such as Ohm's law and problems dealing with DC circuits to motivate learning and reinforce concepts presented.

EE301/ EE302
Active Components and Circuits/Lab
Presents the basic concepts of semiconductor theory, including detailed discussions of PN junctions; diode circuits; bipolar transistors; transistor biasing circuits; AC equivalent circuits for bipolar transistor analysis; field effect transistors; SCRs, UJTs, TRIACS; integrated circuits.
Prerequisites: *E100, E102*

MA103
Trigonometry for Electronics
Presents basic concepts and operations of trigonometric functions including trigonometric ratios; right triangles; trigonometric identities; radian and degree measurement; vectors; polar and rectangular forms; graphs of trigonometric functions. Provides applications to electronics including alternating current; phase angles; working with series and parallel AC circuits.
Prerequisite: *MA101*

EE501/ EE502
Digital Principles/Lab
Presents detailed analysis involving basic logic gates; integrated logic families; Boolean algebra; flip-flops and latches; numbering systems and codes; counters and registers; arithmetic circuits; memory devices; digital displays.
Prerequisites: *E100, E102, EE301, EE302*

CS129
Computer Fundamentals
Presents basic usage and concepts including proper keyboarding techniques utilizing alphabetic and numeric keys, symbols, and the numeric keypad. Students will also become competent in the basic operation of the Windows operating system. Plus an introduction to the core concepts of the Microsoft Office Suite including Word and Excel are covered.

MA301
Advanced Algebra
Presents advanced algebra topics such as solving simultaneous equations; determinants; fractional exponents; complex numbers; common and natural logarithms. Provides practical electronic application topics including binary; octal; hexadecimal number systems; and basic Boolean algebra.
Prerequisites: *MA101, MA103*

E403/ E404
PLC I & II
Presents the basics of programmable controllers to include a variety of input and output modules; timers and counters and programming techniques.
Prerequisites: *E100, E102, EE301, EE302, EE501, EE502*

GS106
Professional Development
Presents students with skills and abilities needed to function effectively in their career field and the business world. Topics will include organizational skills, time management, attitude, public relations, goal setting and preparing for a job in the student's chosen field.

ET401
Externship
ET
This externship training will provide the student with a challenging and exciting opportunity to apply skills under supervision in an on-the-job setting in the electronics field. The externship site supervisor will be evaluating personal qualities as well as classroom skills.

Medical Equipment Technician Course Descriptions

SS100
Strategies for Success
This course presents students with a framework for examining their lives from a self-discovery perspective. Students will discover their own learning styles, strengths and weaknesses, learn to set goals effectively and practice academic and life skills.

E100
Electricity Principles
Presents the basic concepts and application of DC and AC electricity including detailed discussion of Ohm's Law; series circuits; parallel circuits; series-parallel circuits; voltage and current dividers; DC and AC motors; conductors and insulators; resistors; capacitors; inductors; batteries; circuit, and analysis.

E102
DC / AC Components and Circuits Lab
In the lab environment the following will be presented: basic concepts and application of DC and AC electricity including detailed discussion of Ohm's Law; series circuits; parallel circuits; series-parallel circuits; voltage and current dividers; DC and AC motors; conductors and insulators; resistors; capacitors; inductors; batteries; circuit, and analysis.

MA101
Algebra for Electronics
Reviews basic arithmetic concepts and operations of fractions; decimals; exponents and roots. Presents basic algebra concepts such as signed numbers; polynomials; factoring; working with formulas; solving equations; graphs and linear functions. Provides practical applications in electronics such as Ohm's law and problems dealing with DC circuits to motivate learning and reinforce concepts presented.

EE301/ EE302
Active Components and Circuits/Lab
Presents the basic concepts of semiconductor theory, including detailed discussions of PN junctions; diode circuits; bipolar transistors; transistor biasing circuits; AC equivalent circuits for bipolar transistor analysis; field effect transistors; SCRs, UJTs, TRIACS; integrated circuits.
Prerequisites: *E100, E102*

MA103
Trigonometry for Electronics
Presents basic concepts and operations of trigonometric functions including trigonometric ratios; right triangles; trigonometric identities; radian and degree measurement; vectors; polar and rectangular forms; graphs of trigonometric functions. Provides applications to electronics including alternating current; phase angles; working with series and parallel AC circuits.
Prerequisite: *MA101*

EE501/ EE502
Digital Principles/Lab
Presents detailed analysis involving basic logic gates; integrated logic families; Boolean algebra; flip-flops and latches; numbering systems and codes; counters and registers; arithmetic circuits; memory devices; digital displays.
Prerequisites: *E100, E102, EE301, EE302*

CS130
Computer Fundamentals
Presents basic usage and concepts including proper keyboarding techniques utilizing alphabetic and numeric keys, symbols, and the numeric keypad. Students will also become competent in the basic operation of the Windows operating system. Plus an introduction to the core concepts of the Microsoft Office Suite including Word and Excel are covered.

MA301
Advanced Algebra
Presents advanced algebra topics such as solving simultaneous equations; determinants; fractional exponents; complex numbers; common and natural logarithms. Provides practical electronic application topics including binary; octal; hexadecimal number systems; and basic Boolean algebra.
Prerequisites: *MA101, MA103*

BMT107/ BMT108
Biomedical Instrumentation/Lab
Presents the basic concepts of physiological measurement practices including electrodes, sensors, transducers, bioelectric amplifiers, signal and noise considerations, electromagnetic interference to medical electronic equipment, medical laboratory instrumentation, and telemetry.
Prerequisites: *E100, E102, EE301, EE302, EE501, EE502*

BMT109
Anatomy and Physiology
Presents an introduction to anatomy and physiology; cells; blood; tissues and organs; structure and function of the skeletal system, muscular system, heart, respiratory system, digestive system, urinary system, endocrine system, and nervous system.

BMT110
Basic Medical Terminology
Presents an introduction to medical vocabulary including pronunciation of medical terms, roots, prefixes, and suffixes, and word building rules with an emphasis on terms associated with the biomedical field.

GS106
Professional Development
Presents students with skills and abilities needed to function effectively in their career field and the business world. Topics will include organizational skills, time management, attitude, public relations, goal setting and preparing for a job in the student's chosen field.

BMT111/ BMT112
Biomedical Systems/Lab
Presents an introduction to typical medical equipment systems found in hospitals and doctor's offices including sterilizers, pressure and cardiovascular devices, electrocardiographs, respiratory therapy equipment, electroencephalography, ICU/CCU equipment, ultrasonography equipment, electrosurgery units, lasers and fiber optics, and radiology and nuclear equipment.
Prerequisites: *E100, E102, EE301, EE302, EE501, EE502, BMT107, BMT108*

CS107
Networking
Presents an overview of networking concepts and their implementation in Windows. The student will understand and identify the tasks involved in supporting Windows networks.

BMT113
Medical Equipment Safety
Presents an introduction to medical safety practices and standards used in health care facilities. Presents an overview of NFPA 99 standards involving electrical systems, gas and vacuum systems, environmental systems, flammable and combustible materials, and medical laboratory standards.
Prerequisites *EE301, EE302, EE501, EE502, BMT107, BMT108*

GS105
Business Communication
Presents the basic concepts of technical writing and effective speaking techniques. Topics include the writing process; writing memos; e-mails; business letters; writing formal reports; speech preparation; communications with employers; formal presentations and the use of graphic aids.

CS117
Problem Solving
Presents topics such as decision making, thinking outside the box, team decision making, and creating positive change in the workplace. This course enhances the opportunity for career success by targeting fundamental skills needed in the student's chosen field.

GS107
Customer Service
Presents the foundations for working effectively with both internal and external customers to include customer behavior, use of technology, diversity in customers, how to encourage customer loyalty, effective listening, and verbal versus non-verbal communication.

BMT114
Externship
BMT
This externship training will provide the student with a challenging and exciting opportunity to apply skills under supervision in an on-the-job setting in the Biomedical technician field. The externship site supervisor will be evaluating personal qualities as well as classroom skills.
Prerequisites: *All Courses*

CNC / Machinist Technician Course Descriptions

CNC 110
Blueprint Reading / GDT
Fundamentals of reading and interpreting information on industrial blueprints with emphasis on manufacturing applications. Topics may include: basics of drawing interpretation, three view projection, visible and invisible edges, dimensioning and tolerances, sections, terminology and notations.

CNC 111
Practical Dimensional Inspection Fundamentals
Introduction to the theory and practice of dimensional inspection of industrial products including basic inspection tools and gauges such as snap, ring, and plug gauges, gauge blocks, surface plates, dial indicators, scales and micrometers. Topics may also include: measuring tools, measuring geometric characteristics, thread inspection, surface finish inspection, calibration, hardness testing, problem solving.

CNC 112
Machining I
This course covers the concepts, principles, and skills required in the operation and application of the metal lathe, milling machine, drill press, and various bench tools. This course also covers OSHA safety standards and is a combination of lecture and hands-on instruction. The student will be able to demonstrate knowledge and skill competencies in machine safety, machine set up, machine operations and capabilities, use of various accessories and attachments, and machine maintenance. Students will machine parts to specifications.

SS 100
Strategies for Success
This course presents students with a framework for examining their lives from a self-discovery perspective. Students will discover their own learning styles, strengths and weaknesses, learn to set goals effectively and practice academic and life skills.

MW 104
Machinist Mathematics
A study of integers, order of operations, fractions, ratios & proportions, percentages, customary & metric conversions, algebra equations, formulas, geometry, angles, triangle theory, right triangles, trigonometry, and the Cartesian & polar coordinate systems.

CNC 113
Machining II
This is a continuation of CNC 112 / Machining I and covers the concepts, principles, and skills required in the operation of the metal lathe, milling machine, drill press, surface grinders, and bench tools. This course covers OSHA safety standards and is a combination of lecture and hands-on instruction. Students will be able to demonstrate knowledge and skill competencies in machine safety, machine set up, machine operations and capabilities, use of various accessories and attachments, and machine maintenance. Students will machine parts to specifications.

CNC 114
Introduction to CNC Machining
This course is an introduction to CNC (Computer Numerical Control) Machining. Students will learn CNC specific safety, basic G&M code programming concepts, programming format, machine offsets, CNC controls and set-up sheet creation through lecture and hands on instruction. Students will be able to demonstrate basic knowledge of the above stated skills upon completion of course.

JDS 100
Job Seeking Development
This course is designed to help students develop the steps necessary to gain and maintain successful employment. The student will learn to prepare for a job interview, learn how to utilize job leads, learn how to respond to classified ads, respond to interview questions, and compose cover letters and post interview letters. Information on the certification process and opportunities such as self-employment will be discussed. Students will also discuss communication in the workplace, using problem solving techniques, participating in groups, following and giving directions, communicating with supervisors, presenting your point of view, and communicating to solve interpersonal conflict.

CS101
Practical Computer Skills
Presents basic usage and concepts including proper keyboarding techniques utilizing alphabetic and numeric keys, symbols, and the numeric keypad. Students will also become competent in the basic operation of the Windows operating system, the EIT network, email basics, and effective use of the internet.

CNC 115
CNC Machining I
This course includes the concepts, principles, and skills required in the operation and application of the CNC Lathe and CNC Mill. The course is a combination of lecture and hands-on instruction. The student will be able to demonstrate knowledge and skill competencies in machine safety, machine set up, programming, machine operations and capabilities, use of various accessories and attachments, and machine maintenance. Students will machine parts to specifications.

CNC 116
CNC Machining II
This course is a continuation of CNC 115 / CNC Machining I. This course includes the concepts, principles, and skills required in the operation and application of the CNC Lathe and CNC Mill. The course is a combination of lecture and hands-on instruction. The student will be able to concentrate on machine set up, programming, machine operations and capabilities, use of various accessories and attachments, and machine maintenance. Students will machine parts to specifications.

CNC 117
CNC Machining III
This course is designed to provide the basic fundamental knowledge necessary to use Mastercam machining software efficiently.

Industrial Maintenance and Mechatronics Course Descriptions

MNT 101
Industrial Mathematics
Students will become competent in solving mathematics problems involving whole numbers, common and decimal fractions, percentages, basic principles of measurement, fundamentals of the metric system, ratio and proportion and other practical geometry. Other topics in technical-vocational mathematics may be discussed.

MNT 102
Blueprint Reading
Fundamentals of reading and interpreting information on industrial blueprints with emphasis on manufacturing applications. Topics may include: basics of drawing interpretation, three view projection, visible and invisible edges, dimensioning and tolerances, sections, terminology and notations.

MNT 103
Practical Dimensional Inspection
Introduction to the theory and practice of dimensional inspection of industrial products including indicators, scales and micrometers**.** Topics may also include: measuring tools, measuring geometric characteristics, thread inspection, surface finish inspection, calibration, hardness testing, and problem solving.

MNT 104
OSHA and Safety
This course covers the requirements of the Occupational Safety and Health Administration's Standards regarding safety compliance in the workplace and those responsible for the implementation of those standards. Topics may include: identifying the OSHA requirements for industry, recognizing potential hazards, safe practices of a responsible worker, Material Safety Data Sheets and safety and health programs in the workplace.

MNT 105
Fluid Power
This course applies the principles and applications of hydraulics and pneumatics as they apply to power and control of industrial equipment. Topics may include: basic mechanical tools, hydraulic and pneumatic principles, blueprint reading, mechanical troubleshooting and preventive maintenance.

MNT 106
Computer Concepts
This course is an introduction to computer technology basics, including the fundamentals of general computer terminology, basic computer functions, the internet, and **MS Office Suite** software.

SS100
Strategies for Success
This course presents students with a framework for examining their lives from a self-discovery perspective. Students will discover their own learning styles, strengths and weaknesses, learn to set goals effectively and practice academic and life skills.

MNT 107
AC/DC Fundamentals
This course covers AC/DC fundamentals by applying electrical theories to circuits and instrumentation. Theory will be related to reading and applying technical schematic drawings to machines, assemblies and electrical applications. Course will concentrate on reading as well as developing schematics for industrial applications. Topics may include Ohm's law, series and parallel circuits, Kirchhoff's Law, resistance, inductance, capacitors, transformers, filters and power factor correction.

MNT 108
Machining Operations
This course includes the concepts, principles, and skills required in the operation and application of lathes and milling machines, surface grinders, and various bench tools. The course is a combination of lecture and hands-on instruction. The student will be able to demonstrate knowledge and skill competencies in machine safety, machine set up, machine operations and capabilities, use of various accessories and attachments, and machine maintenance. Students will machine parts to specifications.

MNT 109
Mechanical Drives
This course studies the applications of bearings and mechanical transmission in industry with emphasis on the importance of maintenance. Students will learn the basic principles of mechanical systems, and their component operation, design and component installation. Topics may include: introduction to bearings, bearings and shafts, plain journal bearings, antifriction bearings, ball and roller bearings, bearing seals and lubrication. The student will learn to perform adjustment, troubleshooting maintenance, and application of mechanical drive components. They will learn to perform shaft alignment using various techniques. The student will learn how to replace/install bearings, couplings, pulleys, chains, sprockets, and gears used in a mechanical drive system.

MNT 110
Welding Concepts
Students will learn oxy-acetylene and plasma arc welding cutting operations and also will perform welds in the flat and horizontal positions in SMAW (Stick), GMAW (Mig), and (FCAW) Flux Core processes. The student will also learn the proper safety procedures used in a welding environment.

MNT 111
Professional Development
Presents students with skills and abilities needed to function effectively in their career field and the business world. Topics will include organizational skills, time management, attitude, public relations, goal setting and preparing for a job in the student's chosen field.

MNT 112
Electric Motor Control
This course covers the design and development of relay logic systems necessary for installing, operating and maintaining industrial relay motor control systems. Emphasis is on electrical and electronic techniques of signal acquisition and control. Topics may include: single phase control, three phase control, programmable controllers, overload prevention devices, starters, speed controls and automatic feedback control systems.

MNT 113
Programmable Logic Controllers
This course is designed to explain and apply the basic concepts of programmable logic controls. Topics may include an overview of PLCs, input/output modules, number systems and codes, memory structure, programming basics, timer instructions, counter instructions, and identifying PLC programming languages.

MNT 114
Preventative Maintenance Applications
Students will be able to perform maintenance on electrical and mechanical equipment used in industrial facilities by utilizing knowledge obtained in the areas of maintenance theory. The student **will learn how** to develop proper documentation techniques for electrical and mechanical equipment.

MNT 115
HVAC Concepts
Application and practice of the principles of air conditioning systems employed in industrial settings including trouble shooting. Topics may include: application of the principles of temperature and pressure, refrigeration cycles, refrigeration management, system components, and refrigeration applied to air conditioning.

MNT 116
Externship
This externship will enable the student to focus their interests in a maintenance setting and will introduce the student to real-world industrial/ commercial working environments under the supervision of skilled maintenance professionals. The student should be prepared to apply his or her hands-on and theoretical knowledge in multiple disciplines such as hydraulics, motor controls, PLC's, or mechanical power transmission.

Heating, Ventilation & Air Conditioning / Refrigeration, Technology Course Descriptions

SS100
Strategies for Success
This course presents students with a framework for examining their lives from a self-discovery perspective. Students will discover their own learning styles, strengths and weaknesses, and learn to effectively

set goals and practice academic and life skills.

RHV120
Refrigeration Theory / Lab
Includes the study of basic terminology, analysis of the basic refrigeration system, introduction to Thermodynamics, EPA refrigerant guidelines and certification, the use of hand tools, special equipment, and electrical test instruments of the trade. The complete operation of the refrigeration sealed system is analyzed and demonstrated. Soldering, brazing and evacuation is the basic lab experience.

RHV121
Electricity and Electronics for HVAC/R
This course is an essential introduction to electricity and electronics. During this course the student will be introduced to the basic concepts of electrical safety, electron theory, magnetism, electro-magnetism, production of electricity, voltage, current, resistance, and watts. The student will also work extensively with Ohms law, and develop a thorough understanding of series and parallel circuits. This course will extend into electrical measurement, components, motors, motor control, electrical diagrams, and schematics.

RHV122
HVAC/R Customer Service
Presents the foundations for working effectively with both internal and external customers to include customer behavior, use of technology, diversity in customers, how to encourage customer loyalty, effective listening, and verbal versus non-verbal communication.

CS101
Practical Computer Skills
Presents basic usage and concepts including proper keyboarding techniques utilizing alphabetic and numeric keys, symbols, and the numeric keypad. Students will also become competent in the basic operation of the Windows operating system, the EIT network, email basics, and effective use of the internet.

RHV123
Commercial Refrigeration Theory / Lab
This course includes theory, operations and troubleshooting of the refrigeration system. A study of design aspects, construction and maintenance of various commercial refrigeration systems to include walk-in coolers, freezers, and ice machines. Labs to support theory concepts will be performed by each student, to include hot gas bypass and pump down systems. *Note: Course includes preparation for the EPA 608 Technician Certification Exam*. ***Pre or Co-requisites:*** *RHV120*

RHV124
Hydronic Heating
A study in the theory of installation, service, repair and piping arrangements of various hydronic heating systems, including hands on lab projects.

RHV125
Environmental Engineering
A study of the conditioning of air for human comfort by applying the principles of thermodynamics. The students develop skills in the most modern techniques of heating and cooling load calculations. Students study the properties of air by extensive use of the psychometric chart and system analysis. The most current energy utilization and conservation measures available are used.

RHV126
Mathematics for HVAC/R
Students will become competent in solving mathematics problems involving whole numbers, common and decimal fractions, percentages, basic principles of measurement, fundamentals of the metric system, ratios and proportion and other practical geometry. Other topics in technical vocational mathematics may be discussed.

JDS100
Job Seeking Development
This course is designed to help students develop the steps necessary to gain and maintain successful employment. The student will learn to prepare for a job interview, utilize job leads, respond to classified ads, respond to interview questions, and compose cover letters and post interview letters. Information on the certification process and opportunities such as self-employment will be discussed.

RHV127
HVAC Theory / Lab
A study of the fundamentals of theory, design, and operation of various heating and cooling systems. Labs will involve both theory and practical hands on experience in both residential and commercial applications, with an emphasis on gas, electric, heat pumps and RTU systems. ***Pre or Co-requisites:*** *RHV120, RHV123*

RHV128
Estimating
A study of installation costs, as well as proper techniques for calculating quantity take offs for labor and materials and related overhead and construction cost data.

RHV129
HVAC/R Control Systems
A study of the application of control practices for HVAC/R systems, including low voltage / line voltage control systems and safety controls with an introduction to digital control and building automation systems. ***Pre or Co-requisites:*** *RHV121*.

RHV130
Green Technologies in HVAC/R
A study of energy efficient HVAC concepts for new and existing building construction projects. This course focuses on energy efficient HVAC equipment design and implementation, energy, refrigerants, construction practices, indoor environment quality and commissioning practices. Students will be introduced to new materials, equipment, and methods as they relate to the Leadership in Energy and Environmental Design (LEED) green building rating system, the benchmark for evaluating the design, construction and operation of high-performance green buildings.

RHV131
Digital Electronics for HVAC/R
A study of digital controls, solid state components, integrated circuits and control boards used in HVAC/R. Solid state devices such as variable frequency drives and Programmable Logic Controllers will be introduced as well as digitally controlled devices, i.e. dampers, valves, pumps, motors, etc. Building Automation will also be addressed. ***Pre or Co-requisites:*** *RHV121, RHV129*

RHV132
Troubleshooting HVAC/R Systems and Equipment
A study of the systematic implementation of procedures used to diagnose and identify the exact causes of various failures in RHVAC systems and equipment. Students will use a hands-on approach using meters, instruments and tools to analyze problems based on temperature, pressure, and electrical readings of HVAC/R equipment and systems. *Note: Course includes preparation for the Industry Competency Exam (ICE) Certification and the North American Technician Excellence (NATE) Certification Exam.*

RHVEXT
Externship
This externship training will provide the student with a challenging and exciting opportunity to apply skills under supervision in an on-the-job setting in the HVAC/R field. The externship site supervisor will be evaluating personal qualities as well as classroom skills.

Welding Technology Course Descriptions

SS100
Strategies for Success
This course presents students with a framework for examining their lives from a self-discovery perspective. Students will discover their own learning styles, strengths and weaknesses, learn to set goals effectively and practice academic and life skills

MW101
Mathematics for Welding I
A study of whole numbers, fractions, decimal fractions, percentages, roots, ratios, and proportions. Also, a study of algebraic expressions, operations with signed numbers, linear equations, systems of equations, quadratic equations, graphing, and word problems.

WLD101
Introduction to Arc Welding Processes
Introduction to Arc Welding Processes is a course that offers instruction in welding techniques using shielded metal arc welding, gas metal arc welding, and gas tungsten arc welding processes. A study of the concepts of metallurgy as related to base metal and welding will be covered. A study

of the theory of electrode selection, joint design and welding techniques will be explored to develop the necessary skills to meet standards required for commercial quality welds.

WLD106
Blueprint Reading
This course will begin by discussing the importance and general aspects of a print. Measurement and basic operations involving common and decimal fractions will be reviewed. The course will proceed to a discussion of the basic metal working processes and planning machines available. Other topics to be addressed include: methods used to cold form metal, welding processes, and structural metals. Principles of blueprint reading will be covered through the use of lines, views, dimensions and projection as used in fabrication and assembly of structural parts drawings. The student will develop skills in standard multi view sketching techniques of common fabrication products. These "hands on" applications are intended to improve the student's ability to interpret standard fabrication drawings which will allow the student to professionally communicate concepts to both production and design personnel. The course will proceed to a thorough study of the principles of blueprint reading as applied to welding drawings. Emphasis will be placed on determining the welding and cutting costs used to prepare a welding estimate. The student will develop the necessary skills to read, interpret, and draw weld symbols as used in structural and machine assemblies.

WLD126
Cutting Processes
This course will begin with a study of terms, types of equipment, and various cutting processes used in industry. This course will then proceed with the development of the manual skills involved in oxyfuel, plasma, sawing and shearing of plate, bar, and pipe. Emphasis will be placed on the proper preparation of base metals for the welding processes including measurement and marking, cutting, and finish grinding to specifications.

WLD127
Safety and Shop Procedures
This course covers the basic elements of safety relating to all welding and cutting processes.
This course will also cover all applicable codes and procedures, including basic documents that govern and guide welding activities in industry.

MW102
Mathematics for Welding II
A study of measurement, plane figures, and geometric solids including the right triangle, circle, prism, cylinder, pyramid, cone and sphere.
Prerequisite: *MW101*

WLD108
AWS D1.1 Structural Steel Welding
This course will provide a development of the skills in all position welding technology necessary to meet qualifications established by the American Welding Society. Emphasis is placed on a thorough development of the skills required for the AWS D1.1 structural steel series of tests.

WLD 110
Gas Metal Arc Welding (GMAW)
Gas Metal Arc Welding (GMAW) is a course that offers instruction and laboratory experience associated with the applications involving electrode selection, joint design, welding techniques and the research of GMAW primary welding variables to develop the skills necessary to meet the standards required for commercial quality welds.

WLD132
Welding Inspection Fundamentals
This course is designed to study the inspection and quality control procedures used to evaluate welding and fabrication designs.

WLD125
Welding Metallurgy
This course offers instruction in the mechanical and physical properties of various materials. The course will begin with a description of the mechanical properties, and proceed to the types of strength and other properties of metals. Other topics to be explored include: weldability of the metals (alloys, aluminum, etc.), nonferrous metals, and the fundamentals of metallurgy.

MW103
Mathematics for Welding III
A study of trigonometric functions: the right triangle, functions of angles of any size, sine and cosine laws, and vector analysis.
Prerequisite: *MW101, MW102*

WLD109
Gas Tungsten Arc Welding (GTAW)
Gas Tungsten Arc Welding (GTAW) is a course that offers instruction in the methods used to develop the high level of skills required to perform GTA welding operations in all positions according to the American Welding Society and American National Steel Institutes quality standards.

WLD119
Pipe Code and Welding Techniques
This course is a study of basic pipe welding techniques. The student will improve manual skills required for pipe welding and develop proper welding techniques for each position according to the A.P.I. and A.S.M.E. codes.
Prerequisite: *WLD116*

WLD124
Structural Steel and Pipe Drawings and Layout
This course is designed to study the common fabrication techniques in structural and pipe including the use of layout tools and assembly tools, blueprint reading, marking and aligning techniques, simple work practices, fabricating weldments, clamping devices and hydraulic jack use. Additionally, this course will provide a detailed study of welding symbols as related to piping systems. Handbooks and tables will be used throughout the course to assist in determining solutions for piping problems.

WLD128
Piping I - Gas Metal Arc Welding of Pipe (GMAWP)
Gas Metal Arc Welding of Pipe (GMAWP) is a course that offers instruction and laboratory experience associated with the applications involving electrode selection, joint design, welding techniques and the research of GMAW pipe welding variables to develop the skills necessary to meet the standards required for commercial quality welds.

GS106
Professional Development
Presents students with skills and abilities needed to function effectively in their career field and the business world. Topics will include organizational skills, time management, attitude, public relations, goal setting and preparing for a job in the student's chosen field.

WLD121
Fabrication Project
A development of a welding project including an original design, estimate, and fabrication. The student will maintain an organized log of daily progress describing problems and solutions encountered

WLD129
Piping II - Shielded Metal Arc Welding of Pipe (SMAWP)
Shielded Metal Arc Welding of Pipe (SMAWP) is a course that offers instruction and laboratory experience associated with the applications involving electrode selection, joint design, welding techniques and the research of SMAW pipe welding variables to develop the skills necessary to meet the standards required for commercial quality welds.

WLD130
Piping III - Gas Tungsten Arc Welding of Pipe (GTAWP)
Gas Tungsten Arc Welding of Pipe (GTAWP) is a course that offers instruction and laboratory experience associated with the applications involving electrode selection, joint design, welding techniques and the research of GTAW pipe welding variables to develop the skills necessary to meet the standards required for commercial quality welds.

WLD131
AWS D1.1 Flux Core Arc Welding (FCAW)
This course will provide the development of welding positions skills necessary to meet the qualifications established by the American Welding Society. Emphasis will be placed on a thorough development of the skills required for the AWS D1.1 structural steel series of tests using the FCAW process.

Electrician Course Descriptions

SS100
Strategies for Success
This course presents students with a framework for examining their lives from a self-discovery perspective. Students will discover their own learning styles, strengths and weaknesses, learn to set goals effectively and practice academic and life skills

ELE 104
Residential Circuit Design
This course deals with the design of electrical systems in residential construction. Emphasis is placed on the use and interpretation of the National Electrical Code (NEC) as it applies to residential applications. The students will learn to properly choose electrical devices, cables and equipment, and group outlets together on actual circuits. The student will be introduced to various over current devices, and they will learn to properly choose those devices for a given residential application. Various residential circuits will be designed and install by the student to meet all NEC requirements.

ELE 105
Residential Construction
This course will introduce the students to the framing and layout principles of residential construction. Various wiring methods, boxes, fittings, and lighting equipment intended for residential use will be discussed and installed. The National Electrical Code in relation to residential electrical design and construction will be applied. Basic electrical floor plans and residential symbols will be shown and used for installation of circuits. Students will learn techniques for installing cabling, boxes, fittings, and lighting fixtures in wood construction. This course will conclude with the installation of a residentially constructed dwelling unit with complete wiring that meets National Electrical Code requirements.

ELE 120
Ohm's Law and Basic Electrical DC Circuits
This course will introduce and define the various electrical quantities: the volt, the amp, the ohm, and the watt. Students will be shown how each of these electrical quantities are related to one another. Ohm's Law will be explained and the students will determine unknown electrical values using these principals. Basic electric circuit conditions will be discussed including: open circuits, closed circuits, short-circuits, ground faults, and overloaded circuits. Circuit conductor names are defined with both the National Electrical Code definition and trade nicknames. Circuit color coding is explained with NEC requirements applied. Basic circuit connections will be explained and studied: (series, parallel, and combination connections). Students will be able to identify the various circuit connections and describe how a circuit is connected. Students will then practice calculating different circuit values for all circuit types.

ELE 121
Introduction to Electricity
This course begins with the study of atomic structure, what electricity is, and how it is produced. Students will learn the different types of electrical systems: (AC and DC). Both the conventional and electron flow theories will be discussed and defined. The terms conductor, insulator, and semi-conductor will be defined. Static electricity will be discussed. Students will learn about resistors and how to read the color bands of a resistor to determine the resistors ohm value. Different electrical measuring instruments are studied, featuring the multi-meter that the student receives with their tool kit. Electrical conduction in liquids and gases are explained with examples of practical use. Batteries and other sources of electricity will also be studied. Students are introduced to the sine wave and the science behind electricity. Introduction to the National Electrical Code and conductor wire charts and tables are explained. Students will learn how to use these tables and charts to determine proper conductor size and insulation.

ELE 122
Residential Services and Special Systems
This course will explore various systems found throughout a residential dwelling unit. Course begins with electric cooking equipment. Student will be shown how to properly size branch circuit conductors and overcurrent devices for electric cooking equipment. Residential heating and cooling systems will be discussed, with an emphasis on electric heating and cooling systems. Students will learn how to properly size branch circuits and overcurrent protection for various heating and cooling systems. Students will also be shown electrical requirements for gas and oil heating systems. Class 2 conductors, television, telephone, and computer communication systems will be discussed. National Electrical Code requirements for these types of cabling systems will be explained along with lab demonstrations with student participation in terminating various low voltage wiring. Smoke alarm system requirements will be covered along with various types of alarm devices: heat detectors, carbon monoxide detectors, and security devices. Course concludes with students learning about the different types of residential services and the various parts and equipment used to install electric service. NEC requirements will be explained including: clearances, strapping and securing, grounding of the service, and proper sizing of residential electric services.
Pre or Co-requisites – *ELE104, ELE105*

ELE 123
Blueprints and Symbols
The purpose of this course is to teach the students how to read and properly interpret different types of construction drawings and blueprints. The students will learn residential, commercial, and industrial drawings. Scaling and dimensioning will be explained and practiced. Different types of construction lines will be defined and studied. Use of symbols will be shown with an emphasis placed on electrical symbols. Students will be able to identify various symbols both electrical and other trade symbols included. Focus will be placed on power, lighting, low-voltage, and control electrical symbols. Different types of drawings will be discussed. Floor plans, site plans, elevations, sections, and details will be defined and studied. Students will use different blueprint packets to answer questions related to the various drawings. Framing types, floor framing, walls, and partitions will be shown. Upon completion of this course student will have a basic understanding of how to take a construction drawing and relate it to field installation. Proper location and type of equipment placement will be understood.

ELE 124
Commercial Circuits and Distribution
This course begins with essential NEC code definitions required for commercial applications. Common wiring methods for commercial construction will be introduced to the students. MC (metal-clad) cabling will be discussed and NEC requirements explained. Students will be shown how to properly install, strip, and terminate MC-cable. EMT (electrical metallic tubing) will be introduced. Students will learn NEC requirements for various commercial type conduits and other raceway systems. Students will be shown how to make various bends in EMT conduit including: 90's, offsets, box offsets, and saddles. Students will then install EMT conduit in different types of scenarios. Students will install conduits in steel framing structures, from suspended strut racks, and surface mounted installations. Commercial loads and circuits will be explained with NEC applications. Three phase circuits will be explained and installed. Conductor installation in conduit and other various raceways will be discussed and practiced. Commercial devices, fixtures, and motors will be studied and installed. NEC requirements for commercial branch circuits and overcurrent devices will be explained and practiced.
Pre or Co-requisites – *ELE104, ELE105*

ELE 125
Commercial Construction
The purpose of this course is to teach the students various methods of commercial construction as it relates to the electrical trade. Students will learn common color codes used for three phase circuits and common voltage ratings for three phase systems. Sizing of commercial circuits, feeders, and panelboards will be explained and installed. Students will bend conduit and learn how to properly size conduit for various installations. NEC requirements for conduit installation and sizing will be performed by the students. Flexible raceway systems will be studied with NEC requirements emphasized. Commercial drawings and symbols will be explained. Commercial type lighting fixtures and exit signs will be discussed and installed. Emergency and standby systems are explained with NEC requirements given. Short circuit and fault currents will be calculated and explained.

Commercial panelboards and breakers will be discussed and practiced.
Pre or Co-requisites – *ELE104, ELE105*

ELE126
AC Essentials of Electricity and Electronics
This course is an essential introduction to electricity and electronics. During this course the student will be introduced to the basic concepts found in electron theory, magnetism, electro-magnetism, production of electricity, voltage, current, resistance, and watts. The student will also work extensively with Ohms law, and develop a thorough understanding of series and parallel circuits. This course will extend into various AC principles such as; inductive reactance, capacitive reactance, frequency, peak and RMS current values, and transformation of AC current with transformers.

ELE 111
AC/DC Motors and Generators
This course covers generators, DC motors, single phase AC motors, three phase AC motors, and three phase alternators. Course will begin with an explanation of the different motor circuit diagrams including: pictorial diagrams, ladder diagrams, schematic drawings, and wiring diagrams. Basic control logic will be discussed with an emphasis on reading and wiring different motor control diagrams. Electromechanical relays, contactors, and magnetic motor starters will be defined and studied. DC generators and their operation will be explained. Generator connections and types will be explored. AC and DC type motors will be studied including calculations to determine a motors rating in voltage, amperage, speed, and torque. Advantages and disadvantages of various types will be discussed. Students will practice installing control circuits using basic ladder diagrams. Students will learn and practice installing pushbuttons, selector switches, relays, contactors, timers, and magnetic motor starters

ELE 127
Single / Three Phase Transformers
This course is the first formal study of single phase transformers used in industry. The students will thoroughly study the theoretic principles of transformer operation, commonly used terminology, and the different types of transformers available. The construction characteristics, components, cooling methods and classifications will also be studied. Each student will learn and apply transformer ratings, winding ratios, polarity, connections, sizing and over current protection of all common single phase transformers. The study and use of auto and buck/boost transformers will also be presented in this course. Through hands-on laboratories, the students will develop their skills by making many of the common transformers connections found in industry. This course will then introduce the student to the principles and characteristics of three phase current and its generation. The student will study the various three phase transformer banking configurations commonly found in industry. Transformer polarity, line/coil voltage & current relationships, transformer ratios, and system grounding will be performed throughout the course. The students will also learn to determine minimum kVA ratings of transformers connected in closed or open systems. After the essential theory is finished, each student will install & energize various three phase banks and record voltage measurements.

ELE 115
Three Phase Motors
This course begins with the operation theory of three phase motors and an overview of the construction components that make up the common types of three phase motors. The students will then study motor nameplate markings and their meanings, and the NEMA standards for motors that include NEMA design, enclosure types and motor dimensions. This course then extends into the uses and applications, motor lead numbering systems, and electrical connections for six, nine, and twelve lead motors. In addition, the same issues will be reviewed for synchronous and wound rotor motors. The students will then study general motor maintenance and troubleshooting that will include cleaning, bearing lubrication, typical problems, testing for grounds and shorts, checking running speed, determining motor rotation, and retagging the untagged leads of nine lead motors. The remainder of this course will explore mechanical drive systems for motors. These drives will include belt, chain, gear and direct coupling systems. Each student will learn common uses and application of all drives with extra emphasis on pulley & belt types and sizes, horsepower and torque relationships, drive selection factors, general terminology, and the interpretation of manufacture literature. Finally, the student will study the proper procedure & methods for drive alignments and discuss the potential problems of misalignments.

ELE 113
Low Voltage Motor Control Circuits
This course begins with the basic low-voltage motor control pilot devices found in industrial applications to include limit switches, pressure switches, float switches, flow switches, etc. Course then covers different control components including types of relays, timers, contactors, and motor starters. This course will then extend into low-voltage control circuits word descriptions and turning those word descriptions into a ladder diagram to wire. Students will begin wiring ladder diagrams that they design and draw based on a given word description. Course includes the installation of rigid metal conduit and liquid-tight flexible metal conduit. Students will install motor control projects using the various conduit systems. Finally, the students will learn and apply essential troubleshooting procedures and techniques for motor control circuits.
Pre or Co-requisite: *ELE 111*

ELE 117
Industrial Controls
The purpose of this course is to teach the student to develop and analyze control circuits for motor drive applications. The control design will meet the needs of the particular installation. This course will include a review of basic motor control circuit requirements and culminate with the student designing a control circuit based on the requirements of the circuit. Maintenance of control circuit components will also be covered.

MW100
Technical Mathematics
A study of whole numbers, fractions, decimal fractions, percentages, roots, ratios, and proportions. Also, a study of algebraic expressions, operations with signed numbers, linear equations, systems of equations, quadratic equations, graphing, and word problems.

JDS100
Job Seeking Development
This course is designed to help students develop the steps necessary to gain and maintain successful employment. The student will learn to prepare for a job interview, learn how to utilize job leads, learn how to respond to classified ads, respond to interview questions, and compose cover letters and post interview letters. Information on the certification process and opportunities such as self-employment will be discussed.

CS119
Computer Essentials
Presents basic usage and concepts including proper keyboarding techniques utilizing alphabetic and numeric keys, symbols, and the numeric keypad. Students will also become competent in the basic operation of the Windows operating system for use with software used in the student's chosen field of study.

ELE 116
Programmable Logic Controllers I
This course introduces the student to basic concepts, principles and hardware of programmable controls. The course includes understanding hardware components, programming and addressing, and wiring input and output modules. The students will develop their skills by programming and wiring various PLC control systems

ELE 118
Programmable logic Controllers II
This course opens with a review of the introductory concepts of programmable controls. This is then developed into the understanding of logic and solid state concepts. This than extends into the different programming languages and there addressing. The student will use this knowledge to develop working systems for the programmable controller in a variety of lab experiments.

ELE 119
Cost Estimating and Technical Writing
The purpose of this course is to teach the student how to price material and time on residential, commercial and industrial electrical installations. Requirements of the National Electrical Code will be reviewed. This course will use the case study method

for learning material. This course brings together material from the previous three terms. Students use their knowledge of electrical systems and code requirements to plan and estimate residential, commercial and industrial projects.
Prerequisite: *ELE 126.*

Automotive Body Technician Course Descriptions

ABT 113
Basic Auto Body Repair I
The student will review: plastics moldings, fasteners, metal straightening and finishing, body filler application, corrosion protection, sand paper usage, plastic body components and bumper cover repair. Also, hand and power tool usage and safety will be reviewed.

ABT 114
Basic Auto Body Repair II
The student will review: movable glass repair and replacement, damage assessment and the billing process.

SS 100
Strategies for Success
This course presents students with a framework for examining their lives from a self-discovery perspective. Students will discover their own learning styles, strengths and weaknesses, learn to set goals effectively and practice academic and life skills.

ABT 115
Automotive Mathematics
This course presents the basic concepts and operations of whole numbers; fractions; decimals; English and Metric measurement; ratios; proportions; and percentages. Basic algebra concepts such as addition and subtraction of signed numbers; the basics of geometry and angle measurement; and working with formulas are presented. Practical application in the automotive trade will be used with each topic.

ABT 116
Automotive Welding I
The student will review: the analysis of metals, oxyacetylene, plasma cutting, MIG welding, aluminum welding and spot welding.

ABT 123
Advanced Auto Body Repair I
The student will review: unibody construction and repair, full-frame construction and repair, panel bonding and replacement, rust repair and fabrication, frame straightening, tram gauge measurements, self-centering gauge measurements, alignment theory and hydraulic equipment usage.

ABT 124
Advanced Auto Body Repair II
The student will review: electrical diagnostics, air bag removal/installation, and air conditioning servicing theory. Additional review includes glass replacement.

CS 136
Computer Principles
Presents basic usage and concepts including proper keyboarding techniques utilizing alphabetic and numeric keys, symbols, and the numeric keypad. Students will also become competent in the basic operation of the Windows operating system, the EIT network, email basics, and effective use of the internet.

GS 104
Business Communications Essentials
Presents the basic concepts of technical writing and effective speaking techniques. Topics include the writing process; writing memos; e-mails; business letters; writing formal reports; speech preparation; communications with employers; formal presentations and the use of graphic aids.

ABT 125
Automotive Welding II
A continuation of ABT 116 / Automotive Welding, including the analysis of metals, oxyacetylene, plasma cutting, MIG, aluminum welding and spot welding.

ABT 133
Auto Surface Preparation I
This course is an introduction to surface preparation, including safety in the shop environment, the proper way to clean an automobile for surface prep, stripping and sanding of metal/plastic surfaces, including surface scratch reduction and the repair of minor surface imperfections. This course also includes the masking of the area to include removal of door handles, moldings, and decals. The auto body damage estimation system is also covered.

ABT 134
Auto Surface Preparation II
This course includes a further review on corrosion protection and seam sealer repair procedures, wet sanding and buffing of finished paint surface and reassembly of hardware. Instruction also includes spray finished paint surfaces, reassembly of hardware, spray gun usage as well as cleaning, mixing and applying primers.

GS 110
Customer Service Essentials
Presents the foundations for working effectively with both internal and external customers to include customer behavior, use of technology, diversity in customers, how to encourage customer loyalty, effective listening, and verbal versus non-verbal communication.

GS 106
Professional Development
Presents students with skills and abilities needed to function effectively in their career field and the business world. Topics will include organizational skills, time management, attitude, public relations, goal setting and preparing for a job in the student's chosen field.

ABT 143
Auto Painting & Refinishing I
This course exposes the student to the different types of paint and chemistry, chemical safety, the single stage paint system, two stage paint system, three stage paint system, spot repair, HVLP use and set up, use of the spray booth and maintenance of equipment.

ABT 144
Auto Painting & Refinishing II
This course covers the final preparation of an automobile entering the paint booth to include masking, panel prep, overall refinishing and evaluation of the finished product.

Medical Billing and Coding Course Descriptions

MBC 110
Career Success Strategies
This course provides the allied health student with the framework necessary for success in school and life. The course is presented from a self-discovery perspective, allowing students to discover and integrate personal skills and characteristics sought after by employers, such as time management, goal setting, handling change, multitasking, and critical thinking. Students also learn how to negotiate conflict and develop a personal values system. While the course focuses career success, college success skills are also introduced, such as learning styles, note-taking skills, study skills, and overcoming test anxiety.

MBC 115
Medical Office Procedures
This course is designed to provide the allied health student with the practical knowledge and hands on skills necessary to function on in a front office. The course introduces students to the healthcare industry and the allied health profession. Students learn professional workplace behavior and attitudes, along with the inter-personal skills necessary to be part of a medical team. Basic computer concepts are addressed, as well as telephone techniques, appointment scheduling, and patient reception. Written communication and mail processing are also covered.

MBC 120
Medical Terminology Essentials
This course is designed to provide the student with a brief overview of medical terminology and commonly used abbreviations to enable the student to have an improved communication system common to those used involved in the healthcare industry. The focus will involve unitization of word parts, medical abbreviations, and medical term recognition, pronunciation, and proper spelling of medical terms.

MBC 125
Anatomy and Physiology Essentials I
This course is designed to provide the student with a knowledge of principles of human anatomy and physiology. Students will learn the structure and function of cells, issues, major organs and selected organ systems. Students will understand the relationship between the building blocks of structures that serves as a hierarchy sys-

tem of the body. The integrating principle of homeostasis is used to show the common interaction among structures. Body systems covered include cells, nervous, cardiovascular, respiratory, digestive/hepatic, and endocrine systems.

MBC 130
Insurance Procedures I
This course is part one of a two-part overview of essential insurance procedures for the allied health student. Students are provided with the basic understanding of insurance procedures and HIPAA compliance. The course focuses on health care payers such as private insurance plans, managed care systems, Medicare, Medicaid, TRICARE, CHAMPVA, workers compensation, and disability programs. The student is also introduced to the basics of hospital billing.

MBC 135
Keyboarding and Word Processing
This course is designed to provide the student with the opportunity to learn touch-type keyboarding skills (keying without looking at your hands) at a productive rate of speed and accuracy. These skills will be developed on the personal computer using the Keyboarding Pro so ware.

MBC 140
Anatomy and Physiology Essentials II
This course is designed to be a continuation of MBC 125. Students continue to learn the structure and function of additional systems such as special senses, urinary/renal, reproductive, musculoskeletal, and the integumentary systems. Students will understand the relationship between the building blocks of structures that serves as a hierarchy system of the body. Upon completion of this course, students will have a fundamental under-standing of the necessity for proper anatomical structure to support proper function of the body.

MBC 145
Diagnostic Coding
This course is designed to provide the student with the resources necessary to perform diagnostic coding. Students will understand why accurate procedural coding is necessary, understand the basics of the health record, and fully understand the rules, guidelines, and the functions of ICD-9CM coding.

MBC 150
Insurance Procedures II
This course is part two of a two-part overview of essential insurance procedures for the allied health student. Students are introduced to the basics of health insurance and types of coverage. The course includes an over-view of diagnostic and procedure coding and completion of insurance claim forms. Students also learn the importance of medical documentation and records management. Students receive hands on practice in problem solving insurance claims and collection strategies.

MBC 155
Procedural Coding
This course provides the student with the knowledge and hands on practice in procedural coding. The course focuses on the background and purpose for CPT coding. Topics covered in the course include symbols, punctuation, differences in the coding system (CPT and ICD-9-CM), and coding guidelines.

MBC 160
Electronic Health Records
This course is designed to provide the students with the understanding of and practical knowledge of electronic health records essential to all medical facilities. The course introduces the student to electronic patient charts and the standards surrounding electronic health records. The course also provides the student with an in-depth and practical training on common electronic health records software program.

MBC 165
Medical Law and Ethics
This course is designed to provide the student with a knowledge of topics that affect a medical practice. Topics include the legal system, liability and malpractice, medical records, and relevant ethical issues. Students are introduced to actual case studies in various ethical subjects.

MBC 170
Hospital Billing and Coding
This course is designed to provide the student with a basic understanding of various aspects of hospital coding and billing. Topics included are the hospital regulatory environment, structure and function of hospitals, patient accounts and data flow, the billing and accounts receivable process, coding, claim forms, payers, reimbursement and HIPPA. The course is designed on the premise that students have a basic understanding of health insurance billing and coding concepts

MBC 175
Career and Professional Development
This course focuses on providing the opportunity for students to learn and adopt methods and attitudes necessary to be a successful employee. Students learn job success strategies, including positive career attitudes, personal and professional poise, business ethics, and professional dress and grooming. Job search techniques, resume writing, interviewing skills, and internet job searches are also presented and discussed. Students are introduced to the job placement assistance provide at the school.

MBC 180
Computerized Medical Office Management
This course introduces the student to common administrative procedures performed in both small and large medical practices. Students will learn to input patient information, bill insurance companies, and schedule appointments. The student will be able to run common reports associated with the medical practice. Day sheets, patient ledgers, and other financial reports that are important to the day-by-day financial operations of the medical practice.

MBC 185
Introduction to Health Information Management
This course is designed to provide the student with an overview of the principles and practices relating to health information management. Students are introduced to health care delivery systems, the patient record, and numbering and filing systems, as well as the legal aspects of health information management.

MBC 190
Advanced Medical Coding
This course is designed to provide the student with the opportunity to practice and learn the advanced CPT and ICD-9 coding. The course provides the student with intense and challenging coding examples and cases to solve.

MBC 195
Disease Process
This course provides a basic understanding of human diseases and offers students the opportunity to under-stand the patient care that is required for major body system disease.

Phlebotomy Technician Course Descriptions

MBC 110
Career Success Strategies
This course provides the allied health student with the framework necessary for success in school and life. The course is presented from a self-discovery perspective, allowing students to discover and integrate personal skills and characteristics sought after by employers, such as time management, goal setting, handling change, multi-tasking, and critical thinking. Students also learn how to negotiate conflict and develop a personal values system. While the course focuses career success, college success skills are also introduced, such as learning styles, note-taking skills, study skills, and overcoming test anxiety.

MBC 115
Medical Office Procedures
This course is designed to provide the allied health student with the practical knowledge and hands on skills necessary to function on in a front office. The course introduces students to the healthcare industry and the allied health profession. Students learn professional workplace behavior and attitudes, along with the interpersonal skills necessary to be part of a medical team. Basic computer concepts are addressed, as well as telephone techniques, appointment scheduling, and patient reception. Written communication and mail processing are also covered.

MBC 120
Medical Terminology Essentials
This course is designed to provide the student with a brief overview of medical terminology and commonly used abbrevia-

tions to enable the student to have an improved communication system common to those used involved in the healthcare industry. The focus will involve unitization of word parts, medical abbreviations, and medical term recognition, pronunciation, and proper spelling of medical terms.

MBC 125
Anatomy and Physiology Essentials I
This course is designed to provide the student with a knowledge of principles of human anatomy and physiology. Students will learn the structure and function of cells, issues, major organs and selected organ systems. Students will understand the relationship between the building blocks of structures that serves as a hierarchy system of the body. The integrating principle of homeostasis is used to show the common interaction among structures. Body systems covered include cells, nervous, cardiovascular, respiratory, digestive/hepatic, and endocrine systems.

MBC 165
Medical Law and Ethics
This course is designed to provide the student with a knowledge of topics that affect a medical practice. Topics include the legal system, liability and malpractice, medical records, and relevant ethical issues. Students are introduced to actual case studies in various ethical subjects.

PB 110
Phlebotomy I
This course consists of the fundamentals of venipuncture to include an understanding of all equipment
utilized for performing phlebotomy. Students will gain knowledge on how to deal with a variety of patients and become proficient on proper handling of specimens and waste disposal. Students also learn to take blood
pressure and pulse.

MBC 140
Anatomy and Physiology Essentials II
This course is designed to be a continuation of MBC 125. Students continue to learn the structure and function of additional systems such as special senses, urinary/renal, reproductive, musculoskeletal, and the integumentary systems. Students will understand the relationship between the building blocks of structures that serves as a hierarchy system of the body. Upon completion of this course, students will have a fundamental understanding of the necessity for proper anatomical structure to support proper function of the body.

MBC 175
Career and Professional Development
This course focuses on providing the opportunity for students to learn and adopt methods and attitudes necessary to be a successful employee. Students learn job success strategies, including positive career attitudes, personal and professional poise, business ethics, and professional dress and grooming. Job search techniques, resume writing, interviewing skills, and internet job searches are also presented and discussed. Students are introduced to the job placement assistance provide at the school.

PB 115
Phlebotomy II
This course is a continuation of venipuncture techniques for the phlebotomist. Students will focus on routine venipuncture, heel stick punctures, and finger stick punctures utilizing the different types of venipuncture equipment. Students will also learn other types of specimen collection and processing.
Prerequisite: PB 110

PB 120
Phlebotomy III
This course is an advanced phlebotomy course with a focus on hands-on practice. Students will enhance their venipuncture skills and become proficient in all phases of venipuncture. Students will continue to practice lab safety procedures, proper collection techniques and handling of specimens. Students are also provided with a review of the requirements to become certified in Phlebotomy Technician. (Certification is not a graduation requirement.)
Prerequisite: PB 110, PB 115

PB 130
Phlebotomy Technician Externship
This course enables the Phlebotomy Technician student the opportunity to apply the skills and knowledge under supervision in a practical on-the-job medical setting. The externship is mandatory, and successful completion of externship is required before a diploma can be awarded.
Prerequisite: PB 110, PB 115, PB 120

SCHOOL CALENDAR

2022

January 1, 2022 ..... New Year's Day
January 3 ..... START WINTER 2022 TERM
March 25 ..... END WINTER 2022 TERM
March 28-29 ..... Break Days

March 30 ..... START SPRING 2022 TERM
April 15..... Good Friday
May 30..... Memorial Day
June 23 ..... END SPRING 2022 TERM
June 24-27 ..... Break Days

June 28 ..... START SUMMER 2022 TERM
July 4..... Independence Day
September 5 ..... Labor Day
September 21 ..... END SUMMER 2022 TERM
September 22-23 ..... Break Days

September 26 ..... START FALL 2022 TERM
November 24-25..... Thanksgiving Break
December 20 ..... END FALL 2022 TERM
December 21-22 ..... Break Days
December 26-30 ..... Holiday Break

2023

January 2, 2023..... New Year's Day
January 3 ..... START WINTER 2023 TERM
March 27 ..... END WINTER 2019 TERM
March 28-29 ..... Break Day

March 30 ..... START SPRING 2023 TERM
April 7..... Good Friday
May 29..... Memorial Day
June 23 ..... END SPRING 2023 TERM
June 26-27 ..... Break Days

June 28 ..... START SUMMER 2023 TERM
July 4..... Independence Day
September 4 ..... Labor Day
September 21 ..... END SUMMER 2019 TERM
September 22-25..... Break Days

September 26 ..... START FALL 2023 TERM
November 23-24..... Thanksgiving Break
December 20 ..... END FALL 2023 TERM
December 21-22 ..... Break Days
December 25-29 ..... Holiday Break

PROGRAM / TUITION / FEES / BOOKS / EQUIPMENT

Program	Tuition	Fees	Technology Fee	Books (Estimated)	Equipment & Supplies (Estimated)
Automotive Body Technician	$18,000.00	$1,560.00	$0.00	$950.00	$1,425.00
Business and Information Management	$12,480.00	$1,200.00	$1,350.00	$2,950.00	$0.00
CNC/Machinist Technician	$13,200.00	$1,100.00	$300.00	$1,050.00	$350.00
Electrician	$19,600.00	$4,000.00	$1,000.00	$2,600.00	$725.00
Electronic Engineering Technology	$31,720.00	$3,050.00	$2,400.00	$4.250.00	$525.00
Electronics Technician	$17,680.00	$1,700.00	$1,200.00	$2,000.00	$525.00
HVAC/R Technology	$15,000.00	$720.00	$0.00	$1,100.00	$1,150.00
Industrial Maintenance and Mechatronics	$13,275.00	$1,800.00	$600.00	$1,750.00	$675.00
Medical Billing and Coding	$12,600.00	$1,050.00	$750.00	$945.00	$0.00
Medical Equipment Technician	$24,840.00	$2,300.00	$1,800.00	$3,000.00	$525.00
Network and Database Professional	$25,220.00	$2,425.00	$750.00	$4,700.00	$650.00
Phlebotomy Technician	$7,425.00	$540.00	$200.00	$750.00	$250.00
Web Design & Social Media Marketing	$19,140.00	$2,640.00	$2,700.00	$3,200.00	$150.00
Welding Technology	$18,480.00	$1,650.00	$300.00	$1,000.00	$625.00

Additional Fees	Amount
Application Fee (All Programs)	$25.00
Registration Fee (All Programs)	$100.00

EIT INFORMATION

Mailing Address
940 Millcreek Mall, Erie, PA 16565

Telephone Numbers
Main Switchboard 814-868-9900
Toll Free 866-868-3743
Fax 814-868-9977

Web Site ..... www.erieit.edu

Admissions E-mail ..... info@erieit.edu

Staff Member or Instructor E-mail..... [First name + first letter of last name] @ erieit.edu