LINCOLN TECH®

2023-2025
Official School Catalog
Volume VII

Revised and Effective December 2023

At the time of publication, every effort was made to assure that this catalog contains accurate information. Please refer to the catalog addenda for any changes or revisions that have occurred since the catalog was published.

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This catalog certified as true and correct in content and policy.

Kevin Clark
CAMPUS PRESIDENT

LINCOLN TECH®

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Introduction

Introduction

Our Mission

Lincoln's mission is to provide superior education and training to our students for in-demand careers in a supportive, accessible learning environment, transforming students' lives and adding value to their communities.

History of the School

Diesel Technology Institute, was founded in 1979 in Enfield, CT. The Institute's main mission was to provide individuals with practical, hands-on skills needed for entry-level positions in the ever-growing technical field of diesel engine mechanics. This training was applicable to the trucking, agriculture, construction, marine, logging, transportation and utility power generation fields.

For over 12 years the school was housed in a 10,000 square-foot facility on Phoenix Avenue in Enfield, CT. The school initially offered a 900-hour training program exclusively.

In 1992, the school expanded its diesel curriculum by an additional 300 hours and added a module in Advanced Electrical and Hydraulic Technology. This new, expanded program consisted of 1200 hours of training. Also, in October 1992, a 1200-hour program in Automotive Technology was introduced to meet the increasing demand for individuals interested in pursuing a career in this field.

In July 1993, the Institute relocated to an expansive, modern 22,000 square-foot facility in Windsor, CT. This facility contained well-equipped labs, classrooms and shop areas.

In October 1993, an Electronic Technology program was added to meet the explosive demand for specialists in this ever-growing field.

Also, at this time, Diesel Technology Institute changed its name to Baran Institute of Technology to reflect its more comprehensive course offerings and institutional objectives.

Baran Institute added an additional 30,000 square-foot facility in Windsor, bringing the total training area up to 52,000 square feet.

In January 2009, the Institute underwent a change of ownership when Lincoln Educational Services Corporation of West Orange, NJ purchased the Baran Institute of Technology.

In October 2009, the Institute underwent a Change of Name from Baran Institute of Technology to Lincoln Technical Institute.

In October 2022, we introduced the Medical Assistant curriculum to our

Lincoln Educational Services Corporation is a leading provider of diversified career oriented postsecondary education. Lincoln offers recent high school graduates and working adults degree and diploma programs in five principal areas of study: health sciences, automotive technology, skilled trades, hospitality services and business and information technology.

In October 2022, we introduced the Medical Assistant curriculum to our list of program offerings.

Lincoln has provided the workforce with skilled technicians since its inception in 1946. Lincoln currently operates over 20 campuses in 14 states under 3 brands: Lincoln College of Technology, Lincoln Technical Institute, and Euphoria Institute of Beauty Arts and Sciences.

Educational Philosophy

Lincoln Technical Institute prepares each student to meet the day-to-day challenges of an ever-changing world. At LTI, this is achieved through a series of lectures and demonstrations, providing the student with the knowledge to perform each task. A comprehensive hands-on laboratory exercise on technical trainers allows the student to practice newly learned skills. Hands-on practical exercises on real-world equipment allows the student to experience tasks performed in the workplace. Although not all classes will have the same amount of hands-on exercises, each class has the appropriate amount for the skills taught. Classroom instruction will lead to "hands-on" teaching and learning to apply the knowledge learned in the classroom. Lincoln Technical Institute is proud of its many graduates who have taken their place in the industry for which they were trained, and will continue to exercise its leadership role in training persons for marketable skills by constantly revising and updating programs as technological change occurs in the industry.

Introduction

A Letter from the President & CEO

We believe education and training increase your self-esteem and enable you to work in a rewarding and satisfying career. In order to achieve our high educational standards, we carefully select qualified instructors that offer competency and experience, as well as a caring commitment to each student's success.

In the development of curricula, we continuously monitor the current industry standards and update our courses regularly to reflect change in the employment trends. Our classrooms offer industry standard equipment that simulates the workplace as closely as possible.

In addition to careful and detailed instruction, faculty, staff and administration provide ongoing support and encouragement. You gain *skills and confidence* at LTI, so you can achieve success here and in other areas of your life.

It is our desire to provide you with the ability and awareness to be of value in a technologically changing world. Your education and training here will be enriching, relevant and empowering. In a very short time, you can become a well-rounded, capable employee in the professional or technical field you choose.

Sincerely,

Scott M. Shaw
President & Chief Executive Officer

Career Programs

ACCREDITED AUTOMOBILE SERVICE TECHNOLOGY

What does ASE Accreditation Mean?

ASE is the National Institute for Automotive Service Excellence and established by the automotive industry to improve the quality of vehicle repair and service through testing and certification. The ASE Education Foundation is a foundation within the ASE organization. The ASE Education Foundation's mission is to improve the quality of automotive technician training programs through voluntary accreditation. The ASE Education Foundation is responsible for the evaluation process, and makes recommendations for ASE program accreditation based on their evaluation. To achieve AST accreditation, a program must pass an evaluation in all eight (8) automobile related areas:

1. Brakes
2. Electrical/Electronic Systems
3. Engine Performance
4. Suspension and Steering
5. Automatic Transmission and Transaxle
6. Engine Repair
7. Heating and Air Conditioning
8. Manual Drive Train and Axles

How did our Automotive Program Become ASE Accredited?

This campus underwent an extensive on-site The ASE Education Foundation review process conducted by an independent evaluation team. The team evaluated the program against standards to include administration, learning resources, finances, student services, instruction, equipment, facilities, instructional staff, and cooperative agreements. Following the completion of this evaluation, the team leader submitted their recommendation to ASE for accreditation. This campus met compliance in all areas and was awarded accreditation for Automobile Service Technology AST designation.

Are our Instructors ASE Certified?

Yes, all of our automotive instructors are required to actively hold the ASE G1 and A6 Certifications and be ASE certified in the areas they teach.

How do our Graduates benefit from an ASE Accredited Program?

To become ASE Certified, a person must meet a minimum level of related work experience and pass ASE certification examinations. A graduate from our ASE Automotive Technology Program may be eligible to substitute the training for up to one year of work experience. For additional information, please visit the ASE website.

Automotive Service Technology

AUXX100—DIPLOMA PROGRAM

DAY/AFTERNOON/EVENING PROGRAMS

Education Foundation

total semester credit hours* 55
total instructional hours 1320
RESIDENTIAL DELIVERY weeks to complete (aft) approximately 57 (including holidays and scheduled breaks)
BLENDED DELIVERY weeks to complete (day/eve) approximately 57 (including holidays and scheduled breaks)

***The listing of credits is not meant to imply that credits can be transferred into college or other private career school programs. Transfer credits are at the sole discretion of the receiving school.**

program objective

Provide the graduate with the entry-level knowledge and skills required to correctly test, diagnose, replace, repair and adjust as necessary the components of the mechanical, electronic, hydraulic, and accessories systems on current automobiles. Upon completion of this program, the graduates will be qualified for entry into the automotive service career field as a technician capable of analysis, problem solving, performing most common service operations and under supervision, more specialized or involved tasks with a dealer, independent shop or other service outlet.

In addition to the technical training, a critical aspect of a Lincoln education is developing the professional skills that are required by our employers. Students will need to demonstrate skill proficiency through a series of professional development activities and seminars which are integrated into each course. The modules include:

- Student Success
- Financial Literacy
- Professional Development
- Career Success

Students will be required to complete out-of-class assignments in each course.

number	course	lecture hours	lab/shop hours	total hours	total semester credits	prerequisites
FOUNDATION COURSES						
AUX100	**Workshop Practices and General Maintenance**	**60**	**60**	**120**	**5.0**	
AUX113	**Gasoline Engine Construction and Operation**	**60**	**60**	**120**	**5.0**	
AUX103	**Electrical Systems**	**60**	**60**	**120**	**5.0**	
	FOUNDATION TOTAL	**180**	**180**	**360**	**15.0**	
CORE COURSES						
AUX202	**Powertrain Electronics**	**60**	**60**	**120**	**5.0**	**AUX100, AUX103, AUX109**
AUX206	**Transmissions and Drive Systems**	**60**	**60**	**120**	**5.0**	**AUX100**
AUX208	**Air Conditioning and Electrical Accessories**	**60**	**60**	**120**	**5.0**	**AUX100, AUX103**
AUX109	**Advanced Automotive Electronics & Diagnostics**	**60**	**60**	**120**	**5.0**	**AUX100, AUX103**
AUX110	**Automotive Brake Systems**	**60**	**60**	**120**	**5.0**	**AUX100**
AUX211	**Automotive Steering and Suspension Systems**	**60**	**60**	**120**	**5.0**	**AUX100**
AUX124	**Service Shop Management**	**60**	**60**	**120**	**5.0**	**AUX100, AUX103, AUX208**
AUX223	**Service Shop Operations**	**60**	**60**	**120**	**5.0**	**AUX100, AUX103, AUX109, AUX202 AUX208, AUX110, AUX211**
	CORE COURSE TOTAL	**480**	**480**	**960**	**40.0**	
	TOTAL PROGRAM	**660**	**660**	**1320**	**55.0**	

{Maximum Time Frame (MTF) 82.5 semester credits}

NOTE: Course numbers and sequences are listed here for reference only. The actual delivery sequence of courses contained in this program may vary depending on individual campus scheduling.

Mode of Delivery: Residential, Blended Learning or Online are the methods we may use to deliver content in each course. The Residential courses are offered on ground at the campus. Blended courses are offered by delivering a fraction of the course in an online format as well as traditional face to face method. Online courses are delivered 100% online. The Blended delivery and online delivery plan will implement distance education activities into each course in the program of study. The use of simulations, case studies, assessments and multimedia will be used to enhance the students understanding of the learning objectives outlined in the course syllabus.

Residential syllabi will be denoted with a "R" in the course number.

Air Conditioning, Refrigeration, and Heating Technology

HVACR411D–DIPLOMA PROGRAM

DAY/AFTERNOON/EVENING PROGRAMS

total semester credit hours* 55
total instructional hours 1320
RESIDENTIAL DELIVERY weeks to complete (aft) approximately 57 (including holidays and scheduled breaks)
BLENDED DELIVERY weeks to complete (day/eve) approximately 57 (including holidays and scheduled breaks)

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program objective

The Heating, Ventilation, Air Conditioning and Refrigeration field anticipates high demand for skilled technicians according to the U.S Department of Labor's Bureau of Labor Statistics. This program ensures that students are skilled in the operation, design, installation, troubleshooting and repair of air conditioning, refrigeration, heating and ventilation equipment for today and the future.

Students enrolled in this program will obtain instruction and demonstrate skills and knowledge in construction safety, measuring and blueprint reading, calculations of ductwork & heating systems with an emphasis on both heat loss and heat gain heating and cooling calculations. Students are also instructed on domestic and commercial refrigeration systems, and gas, oil and electric heating of both water and steam. The systems that control indoor climate are constantly evolving to reflect technological advancements and environmental concerns and Lincoln students will be prepared to meet the evolution.

Students will receive both classroom and lab learning opportunities simulating real-world applications. Students are trained in the installation and repair of refrigeration, heating, and cooling mechanical and electrical control systems of both residential homes and commercial buildings. In addition, students receive instruction in energy efficiency, renewable energy, as well as energy conservation practices, energy auditing techniques and system performance verification of heating and cooling equipment.

Upon completion of this program, graduates can expect to meet the essential entry level skills and knowledge required of an HVAC technician. With additional experience graduates may pursue opportunities allowing them to work independently, without direct supervision; supervise crews or teams of other technicians; or start their own business. Graduates may also choose to specialize in one or more specific areas of the HVAC market including refrigeration, air conditioning, and heating.

Students will be required to complete out-of-class assignments in each course.

number	course	lecture hours	lab/shop hours	total hours	total semester credits	prerequisites
HV131A	HVACR Basic Math	36	24	60	2.5	
HV131B	HVACR Trade Math	36	24	60	2.5	
HV132	Fundamentals of Refrigeration	36	24	60	2.5	
HV133	Basic Electricity and Control Circuits	36	24	60	2.5	
HV134	OSHA 30	36	24	60	2.5	
HV135	Domestic, Commercial and Special Refrigeration Systems	36	24	60	2.5	HV132, HV133
HV136	Air Conditioning and Heat Pump Systems	36	24	60	2.5	HV132, HV133
HV137A	Oil Burner Fundamentals	36	24	60	2.5	
HV137B	Oil Burner Controls and Servicing	36	24	60	2.5	HV133, HV137A
HV138	EPA Refrigerant Standards and Certification	36	24	60	2.5	
HV139	Basic Building Trades Blueprint Reading/System Design and Layout	36	24	60	2.5	HV131B
HV140	Heating Systems Fundamentals	36	24	60	2.5	
HV141	Forced Air Heating and Cooling	36	24	60	2.5	HV136
HV142	Brazing, Soldering, Cutting and Piping	36	24	60	2.5	
HV143	International Mechanical Code	36	24	60	2.5	HV132, HV140
HV144	HVAC Related Codes and Standards	36	24	60	2.5	HV133, HV140
HV145A	Sheet Metal Theory I	36	24	60	2.5	HV131A, HV131B
HV145B	Sheet Metal Theory II	36	24	60	2.5	HV131A, HV145A
HV146	Heating Hydronic and Steam	36	24	60	2.5	HV140
HV147	SMACNA	36	24	60	2.5	
HV120A	Energy Efficiency and Green Technology Systems I	36	24	60	2.5	HV132, HV133, HV136, HV140
HV120B	Energy Efficiency and Green Technology Systems II	36	24	60	2.5	HV120A, HV132, HV133, HV136, HV140
	TOTALS	792	528	1320	55.0	

{Maximum Time Frame (MTF) 82.5 semester credits}

NOTE: Course numbers and sequences are listed here for reference only. The actual delivery sequence of courses contained in this program may vary depending upon scheduling needs.

Mode of Delivery: Residential, Blended Learning or Online are the methods we may use to deliver content in each course. The Residential courses are offered on ground at the campus. Blended courses are offered by delivering a fraction of the course in an online format as well as traditional face to face method. Online courses are delivered 100% online. The Blended delivery and online delivery plan will implement distance education activities into each course in the program of study. The use of simulations, case studies, assessments and multimedia will be used to enhance the students understanding of the learning objectives outlined in the course syllabus.

Residential syllabi will be denoted with a "R" in the course number.

CNC Machining and Manufacturing Technology

CMMT100D—DIPLOMA PROGRAM

DAY/AFTERNOON/EVENING PROGRAMS

total semester credit hours* 35
total instructional hours . . . . . .900 (including holidays and scheduled breaks)
RESIDENTIAL DELIVERY weeks to complete (aft) approximately 52 (including holidays and scheduled breaks)
BLENDED DELIVERY weeks to complete (day/eve) approximately 52 (including holidays and scheduled breaks)

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program objective

A strong domestic manufacturing base is vital to the United States economy, as manufactured goods are necessary for trade. The term manufacturing is very broad and includes the use of machine tools required to manufacture finished products. These products can range from an array of plastics to wood and metals. Manufacturers use sophisticated turning and milling machines, grinders, and computerized numerical control (CNC) machines to bring products from concept design to reality.

The CNC Machining and Manufacturing Technology program prepares students for entry-level positions as CNC Operators or Set-up Technicians within a Modern Manufacturing facility. Students will learn about the fundamental skills needed for the operation and setup of complex manufacturing machines that utilize turning, milling and multi-axis machining technology. Students will be prepared to qualify for credentials from the National Institute for Metalworking Skills (NIMS) in the areas of Materials, Measurement and Safety, Job Planning, Bench work and Layout, CNC Milling (setup and programming), CNC Turning (setup and programming), CNC Operator - Turning, and CNC Operator - Milling.

Students will be required to complete out-of-class assignments in each course.

number	course	lecture hours	lab/shop hours	total hours	total semester credits	prerequisites
MT-101	**Manufacturing Your Success**	**60**	**30**	**90**	**3.5**	
MT-102	**Blueprint Reading and Precision Measurement**	**30**	**60**	**90**	**3.5**	
MT-103	**Machining Process**	**30**	**60**	**90**	**3.5**	
MT-104	**CNC Milling Set-up and Programming**	**30**	**60**	**90**	**3.5**	
MT-105	**CNC Turning Set-up & Programming**	**30**	**60**	**90**	**3.5**	
MT-106	**CAM Mill Design & Tool Path**	**30**	**60**	**90**	**3.5**	**MT101, MT102, MT103, MT104**
MT-107	**CAM Lathe Design & Tool Path**	**30**	**60**	**90**	**3.5**	**MT101, MT102, MT103, MT105**
MT-108	**Modern Milling, Drilling & Workholding**	**30**	**60**	**90**	**3.5**	**MT101, MT102, MT103, MT104**
MT-200	**Advanced Multi Axis Machining**	**30**	**60**	**90**	**3.5**	**MT101, MT102, MT103, MT104, MT105, MT106, MT107, MT108**
MT-201	**Workplace Simulation and Job Readiness**	**30**	**60**	**90**	**3.5**	**MT101, MT102, MT103, MT104, MT105, MT106, MT107, MT108**
	TOTALS	**330**	**570**	**900**	**35.0**	

{Maximum Time Frame (MTF) 52.5 semester credits}

NOTE: Course numbers and sequences are listed here for reference only. The actual delivery sequence of courses contained in this program may vary depending on individual campus scheduling.

Mode of Delivery: Residential, Blended Learning or Online are the methods we may use to deliver content in each course. The Residential courses are offered on ground at the campus. Blended courses are offered by delivering a fraction of the course in an online format as well as traditional face to face method. Online courses are delivered 100% online. The Blended delivery and online delivery plan will implement distance education activities into each course in the program of study. The use of simulations, case studies, assessments and multimedia will be used to enhance the students understanding of the learning objectives outlined in the course syllabus.

Residential syllabi will be denoted with a "R" in the course number.

Collision Repair and Refinishing Technology

COL105BD—DIPLOMA PROGRAM

DAY/AFTERNOON/EVENING PROGRAMS

total semester credit hours* 41.5
total instructional hours . . . . . 1000 (including holidays and scheduled breaks)
BLENDED DELIVERY weeks to complete (day/aft/eve) approximately 54 (including holidays and scheduled breaks)

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program objective

This program is designed to provide the student with a comprehensive understanding and hands-on application of industry standard collision repair and refinishing techniques. The program also provides information on the latest collision repair tools, equipment, and techniques as well as important safety tips and strategies for students to use in protecting themselves and the environment. It offers an insight into what it takes to become a successful, well-rounded collision repair technician. Graduates of the "Collision Repair and Refinishing Technology" program will be presented with the basic skills and knowledge that an entry-level technician needs to obtain employment in the collision industry. Upon graduation, the student will be qualified to work in a shop that repairs conventional and unitized bodies using various manufacturers frame, alignment, and paint equipment. This program is structured to prepare the student with I-CAR Pro Level 1 Certifications in both the Non-Structural and Refinish areas along with preparation for I-CAR steel and aluminum welding certifications. Students will be required to complete out-of-class assignments in each course.

number	course	lecture hours	lab/shop hours	total hours	total semester credits	prerequisites
CR101B	**Introduction to Collision Repair**	**80**	**20**	**100**	**4.5**	
CR102B	**Steel Welding Techniques and Processes**	**35**	**65**	**100**	**4.0**	
CR103B	**Structural I**	**80**	**20**	**100**	**4.5**	**CR101B**
CR104B	**Vehicle Electrical and Mechanical Systems**	**80**	**20**	**100**	**4.5**	**CR101B**
CR107B	**Refinishing I**	**35**	**65**	**100**	**4.0**	**CR101B**
CR109B	**Non-Structural I**	**35**	**65**	**100**	**4.0**	**CR101B**
CR116B	**Measuring and Damage Assessment**	**35**	**65**	**100**	**4.0**	**CR101B, CR102B, CR103B CR104B, CR109B, CR107B**
CR209B	**Non-Structural II**	**35**	**65**	**100**	**4.0**	**CR101B, CR109B**
CR210B	**Aluminum Welding and Metal Fabrication Techniques**	**35**	**65**	**100**	**4.0**	**CR101B, CR102B**
CR211B	**Advanced Refinishing Techniques with Custom Painting**	**35**	**65**	**100**	**4.0**	**CR101B, CR107B**
	TOTALS	**485**	**515**	**1000**	**41.5**	

{Maximum Time Frame (MTF) 62.0 semester credits}

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Mode of Delivery: Residential, Blended Learning or Online are the methods we may use to deliver content in each course. The Residential courses are offered on ground at the campus. Blended courses are offered by delivering a fraction of the course in an online format as well as traditional face to face method. Online courses are delivered 100% online. The Blended delivery and online delivery plan will implement distance education activities into each course in the program of study. The use of simulations, case studies, assessments and multimedia will be used to enhance the students understanding of the learning objectives outlined in the course syllabus.

Diesel and Truck Service Technology

MHTX100—DIPLOMA PROGRAM

DAY/AFTERNOON/EVENING PROGRAMS

total semester credit hours* 55
total instructional hours 1320
RESIDENTIAL DELIVERY weeks to complete (aft) approximately 57 (including holidays and scheduled breaks)
BLENDED DELIVERY weeks to complete (day/eve) approximately 57 (including holidays and scheduled breaks)

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program objective

This program is designed to prepare students for entry into the diesel and truck career field. Students enrolled in this program will learn theory, functions, diagnostics, and repair of diesel engines and natural gas fuel systems. Using industry standard tools and equipment, students will diagnose and repair electrical, mechanical, and fuel delivery systems on diesel engines, trucks, and trailers. Upon successful completion of the program, the graduate should possess knowledge and versatility in the diesel and truck repair field to qualify for entry-level positions as a mechanic, technician, mechanic's helper, or a fleet service technician in truck dealerships, fleet maintenance departments, private repair enterprises, or franchised truck repair organizations.

In addition to the technical training, a critical aspect of a Lincoln education is developing the professional skills that are required by our employers. Students will need to demonstrate skill proficiency through a series of professional development activities and seminars which are integrated into each course. The modules include:

- Student Success
- Financial Literacy
- Professional Development
- Career Success

Students will be required to complete out-of-class assignments in each course.

number	course	lecture hours	lab hours	total hours	total semester credits	prerequisites
FOUNDATION COURSES						
MHT100	**Shop Practices & Hydraulic Principles**	**60**	**60**	**120**	**5.0**	
AUX103	**Electrical Systems**	**60**	**60**	**120**	**5.0**	
MHT101	**Diesel Engines Construction and Operation**	**60**	**60**	**120**	**5.0**	
	FOUNDATION TOTAL	**180**	**180**	**360**	**15.0**	
CORE COURSES						
AUX208	**Air Conditioning and Electrical Accessories**	**60**	**60**	**120**	**5.0**	**MHT100, AUX103**
MHT102	**Diesel Fuel Systems and Tune Up**	**60**	**60**	**120**	**5.0**	**MHT100, AUX103, MHT108**
MHT103	**Heavy Duty Drive Trains**	**60**	**60**	**120**	**5.0**	**MHT100**
MHT106	**Truck Steering and Suspension Systems**	**60**	**60**	**120**	**5.0**	**MHT100**
MHT107	**Air and Hydraulic Brake Systems**	**60**	**60**	**120**	**5.0**	**MHT100**
MHT108	**Truck Electrical and Electronics**	**60**	**60**	**120**	**5.0**	**MHT100, AUX103**
AUX124	**Service Shop Management**	**60**	**60**	**120**	**5.0**	**MHT100, AUX103, AUX208**
MHT223	**Preventative Maintenance & Welding**	**60**	**60**	**120**	**5.0**	**MHT100, AUX103, MHT106, MHT107**
	CORE COURSE TOTAL	**480**	**480**	**960**	**40.0**	
	TOTAL PROGRAM	**660**	**660**	**1320**	**55.0**	

{Maximum Time Frame (MTF) 82.5 semester credits}

Note: Course numbers and sequences are listed here for reference only. The actual delivery sequence of courses contained in this program may vary depending on individual campus scheduling.

Mode of Delivery: Residential, Blended Learning or Online are the methods we may use to deliver content in each course. The Residential courses are offered on ground at the campus. Blended courses are offered by delivering a fraction of the course in an online format as well as traditional face to face method. Online courses are delivered 100% online. The Blended delivery and online delivery plan will implement distance education activities into each course in the program of study. The use of simulations, case studies, assessments and multimedia will be used to enhance the students understanding of the learning objectives outlined in the course syllabus.
Residential syllabi will be denoted with a "R" in the course number.

CIP CODE: 46.0302

SOC CODE: 49-2098 • 47-2111

Electrician Training

ET213D – DIPLOMA PROGRAM

DAY/AFTERNOON/EVENING PROGRAMS

total semester credit hours* 48
total instructional hours 1200
RESIDENTIAL DELIVERY weeks to complete (aft) approximately 52 (including holidays and scheduled breaks)
BLENDED DELIVERY weeks to complete (day/eve) approximately 52 (including holidays and scheduled breaks)

***The listing of credit hours is not meant to imply that credits can be transferred into college or other private career school programs. Transfer credits are at the sole discretion of the receiving school.**

program objective

This is a comprehensive program that prepares a student to enter the Electrical field. A foundation of Basic Math and Electrical trade Algebra and Trigonometry prepare the student for Electrical theory and concepts. The program continues with Blue Print reading, an essential skill required of a licensed Electrician. Each course in the program is an important component of knowledge needed in the Electrical Industry. The National Electrical Code is covered thoroughly in four separate courses in which each article in the NEC is reviewed. Courses such as Motor Control, Power Distribution, PLC's 1 and 2 and Motor Generator Theory prepare the student for Commercial and Industrial installations. Basic Telecommunications and Cabling include voice, data, wireless, network and broadband technologies. Two Solar Energy courses introduce the student to the growing field of green technology. Semi-Conductors for Electricians prepares the student for new complex technologies that are being developed and implanted at faster and faster rates.

The Lab portions of our program train the student on basic but essential hands on skills that are needed upon entrance in the Electrical Field. These hands on skills combined with our extensive classroom courses prepare the Graduate for a successful and rewarding career in the Electrical Industry. Students will also be trained on OSHA 30 standards and given the opportunity to take and pass the exam. OSHA 30 certification is mandated by the State licensing board for all apprentices. An apprentice needs to have his or her OSHA 30 certification in order to seek qualification for future licensure. Upon successful completion of the program the State of Connecticut mandated 720 hours of classroom study is satisfied.

Students will be required to complete out-of-class assignments in each course.

number	course	lecture hours	lab/shop hours	total hours	total semester credits	prerequisites
ET101A	Basic Math	36	14	50	2.0	
ET102A	Electrical Theory I	36	14	50	2.0	
ET103A	Electrical Theory II	36	14	50	2.0	ET102A
ET104A	Electrical Code I	36	14	50	2.0	
ET105A	Algebra and Trigonometry	36	14	50	2.0	ET101A
ET106A	Electrical Code II	36	14	50	2.0	ET104A
ET107A	Basic Telecommunications	36	14	50	2.0	
ET108A	Blueprint Reading	36	14	50	2.0	
ET109A	Basic Alarm Systems	36	14	50	2.0	
ET110A	Fire Access, CCTV Systems	36	14	50	2.0	
ET111A	Electrical Code III	36	14	50	2.0	ET104A, ET106A
ET112A	Telecommunications and Cable Installation	36	14	50	2.0	
ET113A	Power Distribution and Load Calculations	36	14	50	2.0	ET102A, ET103A
ET114A	Electrical Code IV	36	14	50	2.0	ET104A, ET106A, ET111A
ET115A	Motor and Generator Theory	36	14	50	2.0	ET102A, ET103A
ET116A	OSHA 30	36	14	50	2.0	
ET117A	Semi-Conductors and electronics	36	14	50	2.0	
ET118	Residential Wiring	36	14	50	2.0	
ET119A	Industrial Motor Control	36	14	50	2.0	ET102A, ET103A
ET120A	Programmatic Logic Controllers I	36	14	50	2.0	ET102A, ET103A, ET119A
ET121A	Programmatic Logic Controllers II	36	14	50	2.0	ET102A, ET103A, ET119A, ET120A
ET122A	Photovoltaic I	36	14	50	2.0	ET102A, ET103A
ET123A	Photovoltaic II	36	14	50	2.0	ET102A, ET103A, ET122A
ET124	Commercial Wiring	36	14	50	2.0	
	TOTALS	864	336	1200	48.0	

{Maximum Time Frame (MTF) 72.0 semester credits}

Note: Course numbers and sequences are listed here for reference only. The actual delivery sequence of courses contained in this program may vary depending on individual campus scheduling.

Mode of Delivery: Residential, Blended Learning or Online are the methods we may use to deliver content in each course. The Residential courses are offered on ground at the campus. Blended courses are offered by delivering a fraction of the course in an online format as well as traditional face to face method. Online courses are delivered 100% online. The Blended delivery and online delivery plan will implement distance education activities into each course in the program of study. The use of simulations, case studies, assessments and multimedia will be used to enhance the students understanding of the learning objectives outlined in the course syllabus.

Residential syllabi will be denoted with a "R" in the course number.

Medical Assistant

MAPX100—DIPLOMA PROGRAM

DAY/AFTERNOON/EVENING PROGRAMS

total semester credit hours* 33.5
total instructional hours 880
RESIDENTIAL DELIVERY weeks to complete (aft) approximately 37 (including holidays and scheduled breaks)
BLENDED DELIVERY weeks to complete (day/eve) approximately 37 (including holidays and scheduled breaks)

***The listing of credits is not meant to imply that credits can be transferred into college or other private career school programs. Transfer credits are at the sole discretion of the receiving school.**

program objective

The Medical Assistant program prepares students to be multi-functional practitioners, thoroughly prepared to perform front office and clinical patient care duties, as well as, basic urgent care procedures. Topics covered include anatomy and physiology, medical terminology, insurance billing and coding, electronic health records, ethics, clinical procedures, aseptic technique, minor surgical procedures, universal precautions, general skills in document formatting, and EKG. This program delivers practical preparation in the healthcare environment.

In addition to the technical training, a critical aspect of a Lincoln education is developing the professional skills that are required by our employers. Students will need to demonstrate skill proficiency through a series of professional development activities and seminars which are integrated into each course. The modules include Student Success, Financial Literacy, Professional Development, and Career Success.

Graduates of this program may find entry-level positions as a Medical Assistant. It also provides the diversity of other settings such as doctors' offices, hospitals, urgent care, outpatient care centers, and other medical facilities.

Students will be required to complete out-of-class assignment in each course, except internship.

number	course	lecture hours	lab hours	internship hours	total hours	total semester credits	prerequisites
FOUNDATION COURSES							
MAP101	**Introduction to Allied Health**	**60**	**60**	**0**	**120**	**5.0**	
	FOUNDATION TOTAL	**60**	**60**	**0**	**120**	**5.0**	
CORE COURSES							
MAP110	**Cardiopulmonary Medical Procedures**	**60**	**60**	**0**	**120**	**5.0**	**MAP101**
MAP120	**Musculoskeletal System and Medication Administration**	**60**	**60**	**0**	**120**	**5.0**	**MAP101**
MAP130	**Clinical Lab Techniques**	**60**	**60**	**0**	**120**	**5.0**	**MAP101**
MAP140	**Laboratory and Surgical Procedures**	**60**	**60**	**0**	**120**	**5.0**	**MAP101**
MAP150	**Administrative Medical Office**	**60**	**60**	**0**	**120**	**5.0**	**MAP101**
MAP300*	**Medical Assisting Internship**	**0**	**0**	**160**	**160**	**3.5**	**MAP101, MAP110, MAP120, MAP130, MAP140, MAP150**
	CORE COURSE TOTAL	**300**	**300**	**160**	**760**	**28.5**	
	TOTAL PROGRAM	**360**	**360**	**160**	**880**	**33.5**	

{Maximum Time Frame (MTF) 50 semester credits}

NOTE: Course numbers and sequences are listed here for reference only. The actual delivery sequence of courses contained in this program may vary depending on individual campus scheduling.

The Internship is a full-time commitment of 160 hours at approximately 32 hours per week for 5 weeks. Internship hours are daytime hours for both day and evening programs. All weeks exclude holidays, course change days and make-up hours for absences during internship. Actual times are set by the internship site. Students are responsible for transportation to and from the intern site, as well as meals.

***Prerequisites: Successful completion of all in-school coursework prior to internship.**

Mode of Delivery: Residential, Blended Learning or Online are the methods we may use to deliver content in each course. The Residential courses are offered on ground at the campus. Blended courses are offered by delivering a fraction of the course in an online format as well as traditional face to face method. Online courses are delivered 100% online. The Blended delivery and online delivery plan will implement distance education activities into each course in the program of study. The use of simulations, case studies, assessments and multimedia will be used to enhance the students understanding of the learning objectives outlined in the course syllabus.

Residential syllabi will be denoted with a "R" in the course number.

Welding and Fabrication Technology with Pipe

WLD200–DIPLOMA PROGRAM

DAY/AFTERNOON/EVENING PROGRAMS

total semester credit hours* 40
total instructional hours 960
RESIDENTIAL DELIVERY weeks to complete (aft) approximately 42 (including holidays and scheduled breaks)
BLENDED DELIVERY weeks to complete (day/eve) approximately 42 (including holidays and scheduled breaks)

***The listing of credits is not meant to imply that credits can be transferred into college or other private career school programs. Transfer credits are at the sole discretion of the receiving school.**

program objective

The Welding Technology program prepares students for entry level welder positions as structural and pipe welders. Students develop key fundamental skills during the initial courses and learn to apply these skills using different and more complex welding procedures. The welding procedures include Shielded Metal Arc Welding (SMAW), Gas Metal Arc Welding (GMAW/MIG), Flux Core Arc Welding (FCAW), and Gas Tungsten Arc Gas Welding (GTAW/TIG). Using each of these procedures, students learn to weld plate and pipe in various positions including horizontal, vertical, and overhead. Students also learn various techniques for cutting and preparing metal for welding procedures.

Upon successful completion of all components of this program, the graduate should possess the working knowledge and skills to qualify as a structural and/or pipe welder using any one of three standard welding processes in construction, fabrication, or plant maintenance work settings. Students should be able to successfully complete pre-qualification tests for any construction structural or pipe related projects.

Maximum shop/lab size: 20 students per instructor.

In addition to the technical training, a critical aspect of a Lincoln education is developing the professional skills that are required by our employers. Students will need to demonstrate skill proficiency through a series of professional development activities and seminars which are integrated into each course. The modules include:

- Student Success
- Financial Literacy
- Professional Development
- Career Success

Students will be required to complete out-of-class assignment in each course.

number	course	lecture hours	lab/shop hours	total hours	total semester credits	prerequisites
FOUNDATION COURSES						
WEL110	**Welding and Cutting Fundamentals**	**60**	**60**	**120**	**5.0**	
	FOUNDATION TOTAL	**60**	**60**	**120**	**5.0**	
CORE COURSES						
WEL120	**Basic Arc Welding Procedures**	**60**	**60**	**120**	**5.0**	**WEL110**
WEL130	**SMAW – Plate Welding**	**60**	**60**	**120**	**5.0**	**WEL110, WEL120**
WEL140	**GMAW/FCAW (MIG) – Plate Welding**	**60**	**60**	**120**	**5.0**	**WEL110, WEL120, WEL130**
WEL150	**GTAW (TIG) – Welding Procedures**	**60**	**60**	**120**	**5.0**	**WEL110, WEL120, WEL130**
WEL160	**SMAW – Pipe Welding**	**60**	**60**	**120**	**5.0**	**WEL110, WEL120, WEL130, WEL140**
WEL170	**GMAW/FCAW (MIG) – Pipe Welding**	**60**	**60**	**120**	**5.0**	**WEL110, WEL120, WEL130, WEL140**
WEL180	**GMAW/GTAW – Fabrication Processes**	**60**	**60**	**120**	**5.0**	**WEL110, WEL120, WEL130, WEL140, WEL150**
	CORE COURSE TOTAL	**420**	**420**	**840**	**35.0**	
	TOTAL PROGRAM	**480**	**480**	**960**	**40.0**	

{Maximum Time Frame (MTF) 60 semester credits}

NOTE: Course numbers and sequences are listed here for reference only. The actual delivery sequence of courses contained in this program may vary depending on individual campus scheduling.

Mode of Delivery: Residential, Blended Learning or Online are the methods we may use to deliver content in each course. The Residential courses are offered on ground at the campus. Blended courses are offered by delivering a fraction of the course in an online format as well as traditional face to face method. Online courses are delivered 100% online. The Blended delivery and online delivery plan will implement distance education activities into each course in the program of study. The use of simulations, case studies, assessments and multimedia will be used to enhance the students understanding of the learning objectives outlined in the course syllabus.

Course Descriptions *Career Programs begin on page 8.*

COURSE NUMBERING SYSTEM:

100 LEVEL COURSES

These are courses that may or may not have prerequisites defined and normally are offered to the student during the learning process in the first academic year.

200 LEVEL COURSES

These are courses that may or may not have prerequisites defined and normally are offered to the student during the learning process in the second academic year.

Automotive Courses

AUX100–WORKSHOP PRACTICES AND GENERAL MAINTENANCE

120 Contact Hrs (60 Lecture Hours, 60 Lab Hours); 5.0 Semester Credit Hours

The overall goal of this course is to facilitate a smooth transition to school by engaging the student in curriculum focusing on academic, career, and life skills. Students will make connections with key personnel within the school that will assist with their questions and provide guidance throughout their education.

The student will be introduced to automotive and diesel systems, industry certifications, and job opportunities. Students will learn essential skills for the vehicle technician including safety, tool and equipment fundamentals, and the proper use of measurement tools such as dial indicators, micrometers, and calipers.

The automotive and diesel content will be balanced by an emphasis on skills that will enable students to be successful in school and in life. These skills will include time management, financial management, goal setting, learning strategies, career planning, and critical thinking strategies.

Prerequisite: None

AUX113–GASOLINE ENGINE CONSTRUCTION AND OPERATION

120 Contact Hrs (60 Lecture Hours, 60 Lab Hours); 5.0 Semester Credit Hours

This course is designed to provide the student with a detailed study of the modern internal combustion gasoline engine from the basic principles of design and operation to inspection, precision measurement, fitting, and reconditioning, including cooling systems, coolants, lubricating systems, and engine lubricants.
Students will learn how to complete repair orders containing customer and vehicle information and corrective action. Students will learn how to research vehicle service information with computer and internet based electronic retrieval systems.
Students will learn how to diagnose various engine concerns through visual and auditory inspection. Students will learn how to disassemble, measure, troubleshoot, service, and reassemble a gasoline powered internal combustion engine. Professional development exercises and seminars are also included in this course.

Prerequisite: None

AUX103–ELECTRICAL SYSTEMS

120 Contact Hrs (60 Lecture Hours, 60 Lab Hours); 5.0 Semester Credit Hours

This course is designed to provide the student with practical theory in basic and solid state circuitry, including body electrical systems, operation and service of automotive storage batteries, automobile charging systems, starting systems, and lighting systems. Students will evaluate components using both conventional and electronic diagnostic equipment.
Students will learn how to complete repair orders containing customer and vehicle information and corrective action. Students will learn how to research vehicle service information with computer and internet based electronic retrieval systems.
Students will learn how to diagnose basic electrical, charging, starting, and lighting circuits through the use of diagnostic equipment to include test lights, multimeters, and continuity testers. Professional development exercises and seminars are also included in this course.

Prerequisite: None

AUX202–POWERTRAIN ELECTRONICS

120 Contact Hrs (60 Lecture Hours, 60 Lab Hours); 5.0 Semester Credit Hours

This course is designed to provide the student with knowledge of conventional and computerized engine control systems and scientific engine testing and tuning. Students will receive detailed instruction on operating principles, testing, replacement and repair of the ignition systems, by-products of combustion, including fuel supply and air induction systems, related emissions controls, and the principles of turbocharging. Emphasis is placed on troubleshooting, replacement, overhaul, and adjustment of fuel injection systems, including computer control models.
Students will learn how to complete repair orders containing customer and vehicle information and corrective action. Students will learn how to research vehicle service information with computer and internet based electronic retrieval systems.
Students will learn how to use diagnostic scan tools to retrieve emission control trouble codes and determine necessary repairs. Students will learn how to diagnose no-start/no-fuel problems on hot and cold engines. Students will learn how to operate exhaust gas analysis equipment and determine necessary action. Professional development exercises and seminars are also included in this course.

Prerequisite: AUX100, AUX103, AUX109

AUX206–TRANSMISSIONS AND DRIVE SYSTEMS

120 Contact Hrs (60 Lecture Hours, 60 Lab Hours); 5.0 Semester Credit Hours

This course is designed to provide the student with a comprehensive coverage of drive train components, including theory, operating principles, service, and repair techniques of the clutch, differential and rear axles. Gearing, levers, hydraulics, component design, troubleshooting, replacement, disassembly, repair, service techniques, and assembly are emphasized. Manual and 4X4 transfer gear boxes, drive-shafts, U-joints, front and rear differentials, and manual transaxles are featured.
This course also provides the student with knowledge and skills needed to successfully diagnose and make needed repairs to automatic transmissions and transaxles. Emphasis is placed on power-flow, operation, design, servicing equipment, troubleshooting, disassembly, inspection, replacement, assembly, testing, and adjustment
Students will learn how to complete repair orders containing customer and vehicle information and corrective action. Students will learn how to research vehicle service information with computer and internet based electronic retrieval systems.
Students will learn how to diagnose, inspect, remove and replace a clutch. Students will learn how to diagnose, clean, inspect, disassemble, and reassemble a transmission/transaxle. Students will learn how to diagnose, inspect, remove, replace, and service front wheel-drive components and rear-wheel drive components. Students will learn how to perform necessary diagnostic tests using special equipment including scan tools to retrieve transmission/transaxle related trouble codes. Students will learn how to perform necessary service, repairs, and adjustments to automatic transmissions and transaxles. Professional development exercises and seminars are also included in this course.

Prerequisites: AUX100

AUX208–AIR CONDITIONING AND ELECTRICAL ACCESSORIES

120 Contact Hrs (60 Lecture Hours, 60 Lab Hours); 5.0 Semester Credit Hours

This course is designed to provide the student with theory and application of automobile air conditioning and heating systems. Students will also be presented with the operation of various automobile accessories to include: power windows, door locks, and seats, and air bag operation and service.
Students will learn how to complete repair orders containing customer and vehicle information and corrective action. Students will learn how to research vehicle service information with computer and internet based electronic retrieval systems.
Students will learn how to diagnose abnormal operation of air conditioning and heating systems, remove and replace air conditioning and heating system components, and evacuate and recharge automobile air conditioning systems. Professional development exercises and seminars are also included in this course.

Prerequisite: AUX100, AUX103

AUX109–ADVANCED AUTOMOTIVE ELECTRONICS & DIAGNOSTICS

120 Contact Hrs (60 Lecture Hours, 60 Lab Hours); 5.0 Semester Credit Hours

This course is designed to provide the student with a more in-depth knowledge of electrical and electronic principles, and advanced circuit applications. Students will learn about automobile computerized control systems as they apply to engine and body control as well as transmission, suspension, braking systems, and other computerized systems. Computer operation, sensors, and actuators are emphasized.
Students will learn how to complete repair orders containing customer and vehicle information and corrective action. Students will learn how to research vehicle service information with computer and internet based electronic retrieval systems.
Students will learn how to diagnose automotive electrical and electronic circuits using a variety of diagnostic equipment to include digital volt-ohm meters, continuity testers, test lights, graphing multimeters, and oscilloscopes. Students will learn how to use diagnostic scan tools to retrieve trouble codes from vehicle computers and determine necessary repairs. Professional development exercises and seminars are also included in this course.

Prerequisite(s): AUX100, AUX103

AUX110–AUTOMOTIVE BRAKE SYSTEMS

120 Contact Hrs (60 Lecture Hours, 60 Lab Hours); 5.0 Semester Credit Hours

This course is designed to provide comprehensive coverage of design, operating principles, maintenance and service of the automotive brake systems and traction control. Emphasis is placed on diagnosis and service of rotors and drums with measuring and resurfacing included. Anti-lock braking is covered from operating principles through diagnosis and service.
Students will learn how to complete repair orders containing customer and vehicle information and corrective action. Students will learn how to research vehicle service information with computer and internet based electronic retrieval systems.
Students will learn how to diagnose mechanical and hydraulic problems within the vehicle braking systems.
Students will learn how to diagnose computer control problems within the anti-lock and traction control systems. Professional development exercises and seminars are also included in this course.

Prerequisite(s): AUX100

AUX211–AUTOMOTIVE STEERING AND SUSPENSION SYSTEMS

120 Contact Hrs (60 Lecture Hours, 60 Lab Hours); 5.0 Semester Credit Hours

This course is designed to provide the student with detailed instruction of the design and operating principles, maintenance and service of automobile suspension and steering systems including steering geometry and alignment angles. Emphasis is placed on wheel alignment procedures, including computerized four-wheel alignment. Service and diagnostics are stressed including McPherson struts, rack and pinion steering systems, and tire design

and applications. New technologies are covered to incorporate electronic steering, and in-depth coverage of computerized suspension systems.
Students will learn how to complete repair orders containing customer and vehicle information and corrective action. Students will learn how to research vehicle service information with computer and internet based electronic retrieval systems.
Students will learn how to diagnose, inspect, and service steering system components using industry standard equipment. Students will learn how to diagnose inspect, remove and replace rear-wheel and front-wheel drive suspension component. Students will learn how to perform alignments on front and rear wheel drive vehicles. Professional development exercises and seminars are also included in this course.
Prerequisite(s): AUX100

AUX124–SERVICE SHOP MANAGEMENT

120 Contact Hrs (60 Lecture Hours, 60 Lab Hours); 5.0 Semester Credit Hours

This course is designed to provide the students with exposure to an actual shop environment, procedures, and protocol by applying prominent skills obtained in previous courses. This course will also provide the student with an orientation and introduction to the management and business component of the automotive industry. The management and procedures associated with automotive related businesses are emphasized including employee/employer expectations, the service write-up process, business organizational structure, career opportunities, customer relations, personnel management, facilities, business records, insurance, and safety. Knowledge relating to management practices within an automotive business will help the student adapt and acclimate to the working environment.
Students will learn how to complete repair orders containing customer and vehicle information and corrective action. Students will learn how to research vehicle service information with computer and internet based electronic retrieval systems.
Students will learn how to prepare an employment resume and application. Students will learn how to complete various forms used in automotive businesses. Students will learn how to properly interview for employment. Professional development exercises and seminars are also included in this course.
Prerequisite(s): AUX100, AUX103, AUX208

AUX223–SERVICE SHOP OPERATIONS

120 Contact Hrs (60 Lecture Hours, 60 Lab Hours); 5.0 Semester Credit Hours

This course is designed to provide the students with exposure to an actual shop environment, operational procedures, and protocol by applying prominent skills obtained in previous courses. Emphasis is placed on the performance and understanding of workshop tasks performed by entry-level technicians. Knowledge testing and skills application are highlighted among the topics.
Students will learn how to complete repair orders containing customer and vehicle information and corrective action. Students will learn how to research vehicle service information with computer and internet based electronic retrieval systems.
Prerequisite(s): AUX100, AUX103, AUX109, AUX202, AUX208, AUX110, AUX211

Air Conditioning, Refrigeration, and Heating Technology Courses

HV131A–HVACR BASIC MATH

60 Contact Hrs (36 Lecture Hours, 24 Lab Hours); 2.5 Semester Credit Hours

This course is designed to present the learner with basic mathematical fundamentals required by today's HVAC technicians. This course will consist of basic mathematical concepts such as addition, subtraction, division, and multiplication which will then be applied to concepts of the HVAC trade.
Prerequisites: None

HV131B–HVACR TRADE MATH

60 Contact Hrs (36 Lecture Hours, 24 Lab Hours); 2.5 Semester Credit Hours

This course is designed to present the learner mathematical concepts as they relate to the HVAC industry. Students will apply basic mathematics operations to whole numbers and common fractions, and learn to convert decimals to fractions, percentages, and averages used by today's HVAC technicians.

Prerequisites: None

HV132–FUNDAMENTALS OF REFRIGERATION

60 Contact Hrs (36 Lecture Hours, 24 Lab Hours); 2.5 Semester Credit Hours

This course is designed to teach a student the core fundamental concepts of refrigeration. This will include knowledge of basic refrigeration components, energy transfer, pressure and temperature relationships, and various gas laws. Students will also learn the use of test instruments such as temperature analyzers, bar gauge manifold assembly, electronic leak detectors, and vacuum pumps.
Prerequisites: None

HV133–BASIC ELECTRICITY AND CONTROL CIRCUITS

60 Contact Hrs (36 Lecture Hours, 24 Lab Hours); 2.5 Semester Credit Hours

This course is designed to teach students the basic principles of electrical theory. Students will gain knowledge about DC and AC currents, series circuits, parallel circuits, transformers, and various power sources. Additional topics will include electrical schematics, relays and circuit layouts. Throughout this course students will perform lab experiments in resistance, voltage, and current in various circuits. Students will also learn the operation, testing, and repair of AC motors.
Prerequisites: None

HV134–OSHA 30

60 Contact Hrs (36 Lecture Hours, 24 Lab Hours); 2.5 Semester Credit Hours

This course is designed to prepare students to successfully achieve their Occupational Safety and Health Administration 30 hour certification. Students will achieve knowledge in proper recordkeeping techniques, general safety practices, health hazard awareness, the usage of personal protective equipment, fire protection safety, cranes and rigging, stairways and ladders, confined spaces and other OSHA safety standards and practices. Students will be given the opportunity to complete their OSHA 30 certification during this course.
Prerequisites: None

HV135–DOMESTIC AND COMMERCIAL AND SPECIAL REFRIGERATION SYSTEMS

60 Contact Hrs (36 Lecture Hours, 24 Lab Hours); 2.5 Semester Credit Hours

This course is designed to broaden a student's knowledge in the field of refrigeration. The domestic section of course covers the radiation characteristics of different metals, the operation of different pumps, and the principals involved in expansion and contraction. The course then progresses to cover the air conditioning and refrigeration equipment found in a residential setting. Students learn to install, troubleshoot, and repair the mechanical and electrical components of household refrigerators, chest-type and open-door freezers, window air conditioners, dehumidifiers, and thru-wall air conditioners and heat pumps. In addition, students will improve their skills developing electrical schematics for domestic systems and their related peripherals including time clocks, multi-speed fans, and selector switches. Students will explore the components and uses of these systems including their methods of heat transfer, temperature controls, humidity controls, defrost methods, and in-line controls, systems covered include low temperature refrigerators, reach-in freezers, refrigerated vending machines, chillers, and commercial ice machines. Students will then learn the proper techniques used in installation, troubleshooting, and repair of these systems.
Prerequisites: HV132, HV133

HV136–AIR CONDITIONING AND HEAT PUMP SYSTEMS

60 Contact Hrs (36 Lecture Hours, 24 Lab Hours); 2.5 Semester Credit Hours

This course concentrates on the many methods of heat transfer in the air conditioning and heating modes. Systems covered include packaged and split air conditioners and heat pumps, both residential and light commercial. Each student will learn the seven steps in application engineering which includes building survey, load calculations, equipment selection, air distribution systems, installation, start-up procedures, and system balancing. Students will also use the proper test equipment in the repair and troubleshooting of these systems. In addition, students will learn about the special piping and plumbing methods in use today.
Prerequisites: HV132, HV133

HV137A–OIL BURNER FUNDAMENTALS

60 Contact Hrs (36 Lecture Hours, 24 Lab Hours); 2.5 Semester Credit Hours

This course will begin with a discussion of fuel oils in use today and their relationship to today's oil burners. Students will progress to study the different components of oil burners, proper servicing and preventative maintenance techniques, and related components. Instruction includes servicing the nozzle, ignition assembly, various fuel pumps, and making adjustments for combustion efficiency.
Prerequisites: None

HV137B–OIL BURNER CONTROLS AND SERVICING

60 Contact Hrs (36 Lecture Hours, 24 Lab Hours); 2.5 Semester Credit Hours

In this course students will learn the effects of incomplete combustion and discuss the elements oxygen, spark, and fuel that make up perfect combustion. Students will learn how to use various combustion equipment to check for combustion problems and excessive fuel consumption. Additionally students will learn about various fuel storage options.
Prerequisites: HV133, HV137A

HV138–EPA REFRIGERANT STANDARDS AND CERTIFICATION

60 Contact Hrs (36 Lecture Hours, 24 Lab Hours); 2.5 Semester Credit Hours

This course concentrates on the refrigerant standards set forth by the EPA. Students will learn about the different refrigerants used today and the refrigerants of the future. They will be trained according to EPA standards in the proper recovery, storage and evacuation of refrigerant containing appliances. Students will be prepared to take the EPA 608 certification exam.
Prerequisites: None

HV139–BASIC BUILDING TRADES BLUEPRINT READING/SYSTEM DESIGN AND LAYOUT

60 Contact Hrs (36 Lecture Hours, 24 Lab Hours); 2.5 Semester Credit Hours

This course concentrates on the skills required to interpret orthographic projections, isometric, and detail drawings. In addition, students will learn to read and interpret blueprints as they relate to the building trades. This course will also cover the layout and design of Heating and A/C systems.
Prerequisites: HV131B

HV140–HEATING SYSTEMS FUNDAMENTALS

60 Contact Hrs (36 Lecture Hours, 24 Lab Hours); 2.5 Semester Credit Hours

This course concentrates on gas and oil fired warm air, hot water, and steam based heating systems. Students will learn the installation, troubleshooting, and repair techniques of these systems along with other related topics. Various heat transfer methods such as hydronic and steam radiation will also be covered. In addition, students will learn to plan, design, and lay out a heating system typically found in a residential setting.

Prerequisites: None

HV141–FORCED AIR HEATING AND COOLING

60 Contact Hrs (36 Lecture Hours, 24 Lab Hours); 2.5 Semester Credit Hours

This course concentrates on gas and oil fired warm air and cooling systems. This course will focus on components, venting requirements and operation. Students will also gain knowledge in installation, troubleshooting, and repairing of various heating and cooling systems. Additionally, students will learn to plan, design, and lay out a heating system typically found in a residential setting.

Prerequisites: HV136

HV142–BRAZING, SOLDERING, CUTTING AND PIPING

60 Contact Hrs (36 Lecture Hours, 24 Lab Hours); 2.5 Semester Credit Hours

This course begins with a discussion on metals used in piping for the HVAC/R industry. Among those discussed will be black iron, cast iron, galvanized metals, copper, brass and steel. Students will learn different piping methods for joining and installing piping systems for HVAC/R. Students will learn and demonstrate proper brazing, soldering, threading and other joining techniques.

Prerequisites: None

HV143–INTERNATIONAL MECHANICAL CODE

60 Contact Hrs (36 Lecture, 24 Lab Hours); 2.5 Semester Credit Hours

Students will learn the proper use and implementation of the various codes governing the installation and service of HVACR equipment and plumbing applications as set forth in the International Mechanical Code. Students will learn to quickly find the regulations pertaining to specific jobs and how to follow them.

Prerequisites: HV132, HV140

HV144–HVAC RELATED CODES AND STANDARDS

60 Contact Hrs (36 Lecture Hours, 24 Lab Hours); 2.5 Semester Credit Hours

Students will learn the proper use and implementation of the various codes governing the installation and service of HVACR equipment and plumbing applications as set forth in the International Plumbing Code and other various related codes. Students will learn to quickly find the regulations pertaining to specific jobs and how to follow them.

Prerequisites: HV133, HV140

HV145A–SHEET METAL THEORY I

60 Contact Hrs (36 Lecture Hours, 24 Lab Hours); 2.5 Semester Credit Hours

This course will focus on air distribution through ducted systems: how they are designed, installed and balanced. This class will also focus on air cleanliness and ways to treat air in a ducted system though the usage of filters, UV lights and other means. The tools used to measure air and airflow will also be discussed.

Prerequisites: HV131A, HV131B

HV145B–SHEET METAL THEORY II

60 Contact Hrs (36 Lecture Hours, 24 Lab Hours); 2.5 Semester Credit Hours

This course will focus on the sheet metal tools, machinery and safety in a sheet metal shop. Types of sheet metal, materials and fasteners will be discussed and demonstrated.

Prerequisites: HV131A, HV145A

HV146–HEATING HYDRONIC AND STEAM

60 Contact Hrs (36 Lecture Hours, 24 Lab Hours); 2.5 Semester Credit Hours

This course is designed to teach students the fundamentals of natural gas and oil fired hydronic and steam systems. Students will learn about water side components, electrical wiring, piping configurations, pumps and maintenance procedures. Additionally students will troubleshoot various component failures using equipment and visual trainers.

Prerequisites: HV140

HV147–SMACNA

60 Contact Hrs (36 Lecture Hours, 24 Lab/Shop); 2.5 Semester Credit Hours

This course will introduce students to standards set forth by the Sheet Metal and Air Conditioning Contractors National Associations standards. Various installation standards such as basic duct construction, duct design, duct performance, duct sealants, flexible duct, grills, and register connections will be covered in detail. Additionally, students will learn application codes and installation of fire and smoke dampers and access doors.

Prerequisites: None

HV120A–ENERGY EFFICIENCY AND GREEN TECHNOLOGY SYSTEMS I

60 Contact Hrs (36 Lecture Hours, 24 Lab Hours); 2.5 Semester Credit Hours

This course introduces HVAC students to Green Technology and its impact on the HVAC industry. Students will receive an overview about green alternatives to comfort heating and cooling systems. Topics will include learning methods for evaluating energy efficiency in any building structure, Solar Thermal and Geothermal Green Technologies.
Students will also learn the fundamentals of Energy Auditing by conducting mechanical and envelope evaluation and pressure analysis, and by pressure analysis, and performing infrared imaging (Thermography).
Students are strongly encouraged to complete certification testing conducted by the Green Mech (Green Mechanical Council).

Prerequisites: HV132, HV133, HV136, HV140

HV120B–ENERGY EFFICIENCY AND GREEN TECHNOL OGY SYSTEMS II

60 Contact Hrs (36 Lecture Hours, 24 Lab Hours); 2.5 Semester Credit Hours

This course continues the study of Green Technology and its impact on the HVAC industry. Students will learn the fundamentals of Solar Thermal and Geothermal energy systems. Topics include basic theory of each system, components, repair and sizing of these systems. Additionally trainers/simulators are used to visually reinforce concepts learned in the classroom.

Prerequisites: HV120A, HV132, HV133, HV136, HV140

CNC Machining and Manufacturing Technology Courses

MT101–MANUFACTURING YOUR SUCCESS

90 Contact Hrs (60 Lecture Hour, 30 Lab Hoursp); 3.5 Semester Credit Hours

The overall goal of this course is to facilitate a smooth transition to school by engaging the student in curriculum focusing on academic, career, and life skills. Students will make connections with key personnel within the school that will assist with their questions and provide guidance throughout their education.

The student will be introduced to modern manufacturing techniques, industry certifications, and job opportunities. Students will learn essential skills involved in Computer Numerical Control (CNC) machining. Emphasis will be placed on safety, equipment, fundamentals of machining, and the proper use of measurement tools used in CNC machining. The machining content will be balanced by an emphasis on skills that will enable students to be successful in school and in life. These skills will include time management, financial management, goal setting, learning strategies, career planning, and critical thinking strategies.

Students will also complete instructional activities to prepare them for credentials from the National Institute for Metalworking Skills (NIMS). An emphasis will be placed on all mathematical computations critical to the machining industry. Students will also learn the proper operation of the Machinist Calculator to determine precise and accurate calculations for tolerance, positioning, quality control, and machine setup.

Prerequisite: None

MT102–BLUEPRINT READING AND PRECISION MEASUREMENT

90 Contact Hrs (30 Lecture Hours, 60 Lab Hours); 3.5 Semester Credit Hours

This course prepares students to understand technical information when reading manufacturing blueprints. Emphasis is placed on locating geometry to create tool paths. Students will learn how to use Geometric Dimensioning and Tolerancing (GD&T) when determining specifications and how to properly calculate tool paths using standard mechanical blueprints. They will also learn to use information located in the title block to calculate acceptable tolerances for part features and determine suitable feeds and speeds for a Computer Numerical Control (CNC) program using Machinist Calculator Pro.

Students will also study the proper use of semi-precision and precision measuring tools and how to read dial, digital, and vernier measuring scales for precision measuring requirements. Students will learn how to calibrate, maintain, and apply the use of precision measuring tools to obtain accurate measurements. Students will also complete instructional activities designed to prepare them for obtaining their level one Materials Measurement and Safety credential from the National Institute for Metalworking Skills (NIMS).

Prerequisite: None

MT103–MACHINING PROCESS

90 Contact Hrs (30 Lecture Hours, 60 Lab Hours); 3.5 Semester Credit Hours

The content of this course will provide students with an understanding of the fundamentals of the machining process. An emphasis is placed on the safety procedures that apply to machining, manufacturing processes, and general safety that applies to industrial manufacturing operations. Students will explore the manual machining procedures that include cutting, drilling, milling, and turning. Students will also use hand tools to prepare a semi-precision layout that will demonstrate their ability in job planning, bench work, and job layout. Students will reinforce their measurement and blueprint reading skills by producing precision parts on manual metalworking machines. In addition, students will be given instruction in the types of materials used in machining. Students will learn the procedures used for hand tools, cutting, drilling, milling, and turning and will apply those procedures on manual milling and turning machines. Students will use precision and semi-precision measuring instruments to complete their projects. Students will also engage in instructional activities to prepare them for obtaining their level one Job Planning, Bench work & Layout credential from the National Institute for Metalworking Skills (NIMS).

Prerequisite: None

MT104–CNC MILLING SET-UP AND PROGRAMMING

90 Contact Hrs (30 Lecture Hours, 60 Lab/Shop); 3.5 Semester Credit Hours

Students will learn to program, set-up, and operate Computer Numerical Control (CNC) milling equipment. Students will receive instruction in machine motion, mill control panels, machine startup, and operations. Topics include programming formats, control functions, program editing, part production, and inspection. Students will manufacture simple parts using CNC milling equipment and will gain the experience of performing quality control inspections before, during, and after CNC operations. Students will complete instructional activities to prepare them for obtaining two credentials from the National Institute for Metalworking Skills (NIMS) in CNC Milling (set-up and programming) and CNC Operator - Milling.

Prerequisite: None

MT105–CNC TURNING SET-UP AND PROGRAMMING

90 Contact Hrs (30 Lecture Hours, 60 Lab Hours); 3.5 Semester Credit Hours

Students will learn the programming, setup, and operation of in Computer Numerical Control (CNC) lathes and turning centers. Students will receive instruction in machine motion, lathe control panel, machine startup and operations. Topics include programming formats, control functions, program editing, part production, and inspection. Students will manufacture simple parts using CNC turning centers and will perform quality control and inspections before, during, and after CNC operations. Students will complete instructional activities to prepare them for obtaining two credentials from the National Institute for Metalworking Skills (NIMS) in CNC Turning (setup and programming) and CNC Operator - Turning.

Prerequisite: None

MT106–CAM MILL DESIGN & TOOL PATH

90 Contact Hrs (30 Lecture Hours, 60 Lab Hours); 3.5 Semester Credit Hours

This course teaches students the integration of Computer-Aided-Design (CAD) and Computer-Aided-Manufacturing (CAM) with a concentration in milling machines. It is a study of modern machining methods and teaches the use of software in creating geometry for milling parts. Students will use CAM software to strategize and create parts that will be machined on a Computer Numerical Control (CNC) Machining Center. Students will then use software to create tool paths from 2D and 3D geometry.

Prerequisite: MT101, MT102, MT103, MT104

MT107–CAM LATHE DESIGN & TOOL PATH

90 Contact Hrs (30 Lecture Hours, 60 Lab Hours); 3.5 Semester Credit Hours

This course teaches students the integration of Computer-Aided-Design (CAD) and Computer-Aided-Manufacturing (CAM) with a concentration on turning machines. It is a study of modern machining methods and teaches the use of software in creating geometry for turning parts. Students use CAM software to strategies and create tool paths that will be machined on a CNC turning centers. Students will use software to create tool paths from 2D and 3D geometry.

Prerequisite: MT101, MT102, MT103, MT105

MT108–MODERN MILLING, DRILLING AND WORKHOLDING

90 Contact Hrs (30 Lecture Hours, 60 Lab Hours); 3.5 Semester Credit Hours

With an emphasis on modern milling, drilling, and workholding processes, students in this course will also learn about high speed machining in modern manufacturing. Students will learn the advantages of using the International System of Units (IS unit) instead of the English measurement system and their grasp of English to Metric conversion will be reinforced. Students will learn about climb milling and conventional milling on Computer Numerical Control (CNC) machines. Students will receive instruction on the types, accuracy, and proper care of tool holders for manufacturing machines, working toward a mastery of the different types of CNC Milling Centers, their components, and the advantages of each. Students will perform projects using the latest technology in CNC milling, tooling, and cutting tools. Students will also understand how to use modern cutting tools for complex projects. Students will also learn how to utilize different types of machine controls using simulated labs and equipment.

Prerequisite: MT101, MT102, MT103, MT104

MT200–ADVANCED MULTI AXIS MACHINING

90 Contact Hrs (30 Lecture Hours, 60 Lab Hours); 3.5 Semester Credit Hours

Students will learn about advanced multi-axis machining. Applying advanced Computer-Aided-Manufacturing (CAM) features and concepts used in modern manufacturing industries, students will learn how to properly manufacture complex parts. Students will work on complex manufacturing projects that will demonstrate competency in advanced machining concepts. Students will also complete instructional activities to prepare them for obtaining their Associate Level Certification in Mill, Lathe, and Multi-axis Machining. This Mastercam certification serves to demonstrate that students have the ability to program and cut quality parts.

Prerequisite: MT101, MT102, MT103, MT104, MT105, MT106, MT107, MT108

MT201–WORKPLACE SIMULATION AND JOB READINESS

90 Contact Hrs (30 Lecture Hours, 60 Lab Hours); 3.5 Semester Credit Hours

Nearing completion of their program, students in this course will apply all of the skills and knowledge gained in previous classes in a simulated workplace environment. Students will apply their skills in equipment operation, programming, blueprint interpretation, machine set-up, safety, and advanced multi-axis machining techniques. By the end of this course, students will be competent in the application of essential skills necessary for the manufacturing of complex parts using computer-aided manufacturing software.

Students spend the majority of their time working in a simulated workplace environment working through a series of assignments. They are evaluated on the quality and accuracy of their work as well as the time taken to work through their assignments.

Prerequisites: MT101, MT102, MT103, MT104, MT105, MT106, MT107, MT108

Collision Repair and Refinishing Technology Courses

CR101B–INTRODUCTION TO COLLISION REPAIR

100 Contact Hrs (80 Lecture Hours, 20 Lab Hours); 4.5 Semester Credit Hours

This course is a detailed introduction to collision repair. Topics to be taught include proper tools and equipment, worker safety, vehicle construction, vehicle systems, diagnosing damage, determining repair or replacement of components, estimating the cost of repairs, corrosion protection, and repair materials and procedures.

Students learn basic surface preparation procedures such as rough sanding, feather edging, fine sanding, priming and finish sanding. Students also learn to mask and tape for spot repairs and complete paint jobs. Students learn how to analyze and repair damaged metal panels using body hammers, dollies, and paintless dent repair techniques. Students also learn how to repair panels by patching, welding, using fiberglass, and chemicals. Students will learn how to remove, replace, and properly align cosmetic panels.

Students learn the proper washing, defect removal, and finishing procedures of a complete vehicle detail. Students also learn how to repair and replace vinyl vehicle roofs.

Prerequisite(s): None

CR102B–STEEL WELDING TECHNIQUES AND PROCESSES

100 Contact Hrs (35 Lecture Hours, 65 Lab Hours); 4.0 Semester Credit Hours

This course is an introduction to welding as it pertains to the collision repair and refinishing industry. The student will learn the necessary safety precautions as required for cutting and welding. Students will learn how to inspect and test a MIG, TIG, and resistance spot-welds. The student will learn how to weld with both MIG and TIG welders plus use various related equipment. Students will also be able to demonstrate plasma arc cutting as well as oxyacetylene cutting. During this class the student will demonstrate the proper procedures for welding and fabricating components in a live shop.

Prerequisite(s): None

CR103B–STRUCTURAL I

100 Contact Hrs (80 Lecture Hours, 20 Lab Hours); 4.5 Semester Credit Hours

This course is designed to teach students how to measure, straighten, and replace steel and aluminum panels including point-to-point measuring and three dimensional measuring equipment and its operation. The student will learn the basic construction of unibody vehicles, conventional frame vehicles, stub frame and space frame vehicles, collision theory, collision forces and the definition of inertia and internal and external forces. The students will also determine the different types of alignment that result from the different types of collisions. Students will learn how to replace and align full and partial vehicle body parts; identify different types of pillars and rocker panels; read and interpret dimension sheets and collision manuals; and identify different frame and frame types.

Prerequisite(s): CR101B

CR104B–VEHICLE ELECTRICAL AND MECHANICAL SYSTEMS

100 Contact Hrs (80 Lecture Hours, 20 Lab Hours); 4.5 Semester Credit Hours

This course is designed to cover basic electricity, electrical and electronic systems, active and passive restraint systems, lighting systems, steering, suspension systems, brakes, and air conditioning systems.

Students will learn how to properly use of automotive electrical testing equipment, identify the types and functions of an automotive wiring harness, including the functions of circuit control and protection devices. The students learn how to safely disconnect, remove, reconnect, and reinstall automotive computers without damage. Students will learn about the function of airbags and other active and passive restraint systems, including diagnostic procedures.

Students learn the principles and functions of automotive brake systems, including diagnostic procedures. Students learn how to remove, repair and replace brake assemblies.

Students apply principles and functions of automotive suspension systems, including diagnostic procedures, disassembly, repair and reassembly of suspension systems, and laser wheel alignment procedures.

Students apply the principles and components of automotive air conditioning systems. Students will learn how to properly evacuate, recharge, and service automotive air conditioning system.

Prerequisite(s): CR101B

CR107B–REFINISHING I

100 Contact Hrs (35 Lecture Hours, 65 Lab Hours); 4.0 Semester Credit Hours

This course is designed to cover the proper use and techniques of automotive painting equipment. This includes spot jobs and complete paint jobs, vehicle preparation, equipment selection, painting techniques, and planning. During the course, students will learn how to perform proper stroke techniques, pressure settings and the proper temperature at which to paint. Students will learn how to properly prepare a vehicle for painting; identify the different types of paint; properly apply various paints; properly mix paint to achieve optimum color and viscosity; properly use paint mixing equipment to achieve proper color matching.

Prerequisite(s): CR101B

CR109B–NON STRUCTURAL I

100 Contact Hrs (35 Lecture Hours, 65 Lab Hours); 4.0 Semester Credit Hours

This course is designed to cover the skills and tools necessary for non-structural repair procedures. Students learn the types of steel used in vehicle construction and types of damage that can occur to steel.

Students will learn various collision repair tools and repair processes related to non-structural repair. Students will also learn various fillers used in non-structural repairs along sanding equipment and methods. The students will also learn about various tools and repair methods of PDR (Paintless Dent Removal).

Students will also learn about bolt-on components such as doors, front, and rear panels including installation and other considerations such as panel alignment and gaps. Weatherstripping and leak types as well as leak prevention are discussed.

Student will also learn tools and techniques for straightening steel.

Prerequisite(s): CR101B

CR116B–MEASURING AND DAMAGE ASSESSMENT

100 Contact Hrs (35 Lecture Hours, 65 Lab/Shop); 4.0 Semester Credit Hours

This course is designed to provide a detailed introduction to assessing, measuring and estimating the damage to conventional and unitized vehicles. The student will learn industry standard measuring devices and damage reporting processes. The students will learn how to use industry standard and conventional vehicle frames aligning equipment and devices.

Students will learn how to analyze structural damage to conventional and unitized vehicles; diagnose vehicle damage by using various manufacturers' electronic measuring devices and frame machines. Students will learn how to properly repair conventional vehicle frames by using frame equipment from various manufacturers' which includes, setting up the various measuring systems and checking and recording all of the measurements of the vehicle.

Prerequisite(s): CR101B, CR102B, CR103B, CR104B, CR107B, CR109B

CR209B–NON-STRUCTURAL II

100 Contact Hrs (35 Lecture Hours, 65 Lab/Shop); 4.0 Semester Credit Hours

This course is designed to provide the student the opportunity to practice the skills of non-structural repair of the vehicle. The students will learn the proper repair, removal, replacement, and adjustment of manual and power window mechanisms. Students will also learn how to straighten metal body parts; repair plastic and composite parts; replace hoods, bumpers, fenders, grilles, and deck lids.

Prerequisite(s): CR101B, CR109B

CR210B–ALUMINUM WELDING AND METAL FABRICATION TECHNIQUES

100 Contact Hrs (35 Lecture Hours, 65 Lab Hours); 4.0 Semester Credit Hours

This course is designed to provide the student the opportunity to learn how to weld aluminum, practice the skills of welding for both steel and aluminum, and apply fabrication. Students will learn the differences between welding steel and aluminum apply this knowledge to MIG welding aluminum. The student will demonstrate the required safety precautions that are a part of welding and cutting procedures in the collision industry. During this shop class the student will demonstrate the proper procedures for welding and fabricating components in a live shop. Students will also demonstrate the procedures that were taught in previous classes with regards to MIG and TIG welding and heating and cutting using a combination torch. Students will learn how to apply skills and techniques utilizing vehicles and mockups.

Prerequisite(s): CR101B, CR102B

CR211B–ADVANCED REFINISHING TECHNIQUES WITH CUSTOM PAINTING

100 Contact Hrs (35 Lecture Hours, 65 Lab Hours); 4.0 Semester Credit Hours

This course will allow the student to practice proper worker protection techniques and the correct methods of handling hazardous material that collision shops generate. Students will learn theory and the student will use the spray equipment and spray booths that they have previously used in other classes. Students will practice the proper methods of mixing and matching colors in a shop situation as well as demonstrate the correct preparation and maintenance procedures for shop equipment for both waterborne and solvent based paints. Students will learn how to safely apply skills and techniques utilizing vehicles and mockups.

The students will learn how to apply airbrush techniques, with an emphasis on freehand skills. Students will learn how to properly select airbrush components; correctly use and maintain an airbrush; creatively layout and mask areas for airbrushing; use and apply decals; and properly blend automotive art with the vehicle's original finish.

This is a blended course, or a web-enhanced course that meets as a traditional on-campus course 80% of the time and 20% of course work occur online. Active participation in the online activities is required in order to pass this course.

Prerequisite(s): CR101B, CR107B

Diesel Courses

MHT100 – SHOP PRACTICES & HYDRAULIC PRINCIPLES

120 Contact Hrs (60 Lecture Hours, 60 Lab Hours); 5.0 Semester Credit Hours

The overall goal of this course is to facilitate a smooth transition to school by engaging the student in curriculum focusing on academics, career, and life skills. Students will make connections with key personnel within the school that will assist with their questions and provide guidance throughout their education.

The student will be introduced to medium and heavy duty truck systems, industry certifications, and job opportunities. Students will learn essential skills for the vehicle technician including safety and equipment fundamentals.

The student will also learn the basic operation of a hydraulic system. This includes giving a description of the operation and the diagnostic procedures for components in a hydraulic system. Students will study Pascal's Law and the Bernoulli's Principle of Hydraulics as they pertain to the repair industry. Lastly, the student will learn how to properly repair the basic hydraulic system in a hydraulic shop.

The course content will be balanced by an emphasis on skills that will enable the student to be successful in school and in life. These skills will include time management, financial management, goal setting, learning strategies, career planning, and critical thinking strategies.

Prerequisite(s): None

AUX103 – ELECTRICAL SYSTEMS

120 Contact Hrs (60 Lecture Hours, 60 Lab Hours); 5.0 Semester Credit Hours

This course is designed to provide the student with practical theory in basic and solid state circuitry, including body electrical systems, operation and service of automotive storage batteries, automobile charging systems, starting systems, and lighting systems. Students will evaluate components using both conventional and electronic diagnostic equipment.

Students will learn how to complete repair orders containing customer and vehicle information and corrective action. Students will learn how to research vehicle service information with computer and internet based electronic retrieval systems.

Students will learn how to diagnose basic electrical, charging, starting, and lighting circuits through the use of diagnostic equipment to include test lights, multimeters, and continuity testers. Professional development exercises and seminars are also included in this course.

Prerequisite(s): None

MHT101 – DIESEL ENGINES CONSTRUCTION AND OPERATION

120 Contact Hrs (60 Lecture Hours, 60 Lab Hours); 5.0 Semester Credit Hours

This course is designed to provide the student with the knowledge and skills necessary to service medium and heavy duty diesel engines. Instruction on the operating principles, construction, design variations, and applications of the diesel engines are emphasized.

The student will learn how to perform a complete disassembly and assembly of the diesel engine, to include the cylinder head, block and timing gears, by using the instructions in the engine's manufacturers service manual. They will also learn the proper methods of inspecting, identifying and naming the components to determine serviceability of the components prior to making a repair. This will include learning how to make all the necessary precision measurements required for diagnosing component failure prior to servicing and repair of the engine.

The student will learn how to service, repair and diagnose the cooling and lubricating system of diesel engines. The student will learn the different types of coolants as well as additives and how to test for Supplemental Coolant Additives (SCA) to determine if additions to or replacement is needed. Students will learn how to perform coolant tests with different testing equipment.

Students will learn how to research vehicle service information with computer and internet based electronic retrieval systems. Professional development exercises and seminars are also included in this course.

Prerequisite(s): None

AUX208 – AIR CONDITIONING AND ELECTRICAL ACCESSORIES

120 Contact Hrs (60 Lecture Hours, 60 Lab Hours); 5.0 Semester Credit Hours

This course is designed to provide the student with theory and application of automobile air conditioning and heating systems. Students will also be presented with the operation of various automobile accessories to include: power windows, door locks, and seats, and air bag operation and service.

Students will learn how to complete repair orders containing customer and vehicle information and corrective action. Students will learn how to research vehicle service information with computer and internet based electronic retrieval systems.

Students will learn how to diagnose abnormal operation of air conditioning and heating systems, remove and replace air conditioning and heating system components, and evacuate and recharge automobile air conditioning systems. Professional development exercises and seminars are also included in this course.

Prerequisite(s): MHT100, AUX103

MHT102 – DIESEL FUEL SYSTEMS AND TUNE UP

120 Contact Hrs (60 Lecture Hours, 60 Lab Hours); 5.0 Semester Credit Hours

This course is designed to provide the student with the knowledge and skills necessary to service fuel systems found on diesel powered truck tractors. The student will learn how to perform maintenance, service and repair on diesel fuel systems such as the Common Rail System, Detroit Diesel Electronic Controls (DDEC), different Cummins Systems, and International HEUI systems. The student will learn how to perform tune-ups on diesel engines by following manufacturer's service procedures and specifications.

The student will learn how to identify the different exhaust compounds from a diesel engine and define the ones that are classified as pollutants. The student will learn about the various manufacturers' exhaust aftertreatment systems. The student will learn how to perform an opacity smoke test and correlate the test results to engine performance and possible component failure.

Students will learn how to research vehicle service information with computer and internet based electronic retrieval systems. Professional development exercises and seminars are also included in this course.

Prerequisite(s): MHT100, AUX103, MHT108

MHT103 – HEAVY DUTY DRIVE TRAINS

120 Contact Hrs (60 Lecture Hours, 60 Lab Hours); 5.0 Semester Credit Hours

This course is designed to provide the student with the knowledge and skills necessary to service the drive trains found on diesel powered truck tractors. The student will learn how to identify the components of a heavy duty clutch system. Students will learn how to diagnose a clutch system for wear and damage and give the possible causes of specific clutch defects. The student will learn how to remove and replace a heavy duty truck clutch system.

The student will learn how to identify and describe the various gear designs and shift mechanisms used in heavy duty trucks. The student will also learn how to calculate both the gear pitch and gear ratios in a heavy duty drive line. The student will learn how to disassemble and reassemble a heavy duty transmission, differential and power divider as well as learning how to service the heavy duty drive line components in maintaining the correct lubricant and the level of lubricant in the system. The student will also learn how to perform basic diagnostic procedures on an automated standard transmission.

Students will learn how to research vehicle service information with computer and internet based electronic retrieval systems. Professional development exercises and seminars are also included in this course.

Prerequisite(s): MHT100

MHT106– TRUCK STEERING AND SUSPENSION SYSTEMS

120 Contact Hrs (60 Lecture Hours, 60 Lab Hours); 5.0 Semester Credit Hours

This course is designed to provide the student with the knowledge and skills necessary to service heavy duty truck steering and suspension systems. The student will learn how to identify, diagnosis, service, repair, and adjust as necessary; the components of a heavy duty truck steering system to include toe-in, camber, caster, axle inclination, turning radius and axle alignment and how they affect tire wear, directional stability and handling. The student will learn how to balance truck tires and wheels and perform a wheel alignment to include the rear axle(s) by using computerized wheel alignment equipment

The student will learn how to service the major tire and wheel configurations used on heavy duty trucks. Students will learn how to perform bearing and seal service on both grease lubricated and oil lubricated front and rear hubs. The student will learn how to perform the basic checks for frame alignment and geometry and how the frame and chassis components are repaired. The student will learn how to service, repair and replace if necessary, the components on the four types of suspension systems.

Students will learn how to research vehicle service information with computer and internet based electronic retrieval systems. Professional development exercises and seminars are also included in this course.

Prerequisite(s): MHT100

MHT107 – AIR AND HYDRAULIC BRAKE SYSTEMS

120 Contact Hrs (60 Lecture Hours, 60 Lab Hours); 5.0 Semester Credit Hours

This course has been designed to provide comprehensive information on air and hydraulic brake systems as they apply to medium heavy duty transport vehicles. The student will learn to identify, locate, and diagnose the components of the truck brake systems, as it applies to hydraulic, air over hydraulic, or air brake systems. The student will learn to perform maintenance, service, and repair of brake system components on medium and heavy duty truck.

The student will learn to identify, locate, diagnose, service, and repair as necessary, components of ABS, EBS systems on a heavy duty truck and trailer. The student will learn to use LED lights and blink codes to assist them in diagnosing problems with the ABS, EBS systems. The student will learn how to perform maintenance, service, repair, and overhaul of disc and drum brakes as it applies to hydraulic, air over hydraulic, and air brake systems found on medium and heavy duty trucks.

Students will learn how to research vehicle service information with computer and internet based electronic retrieval systems. Professional development exercises and seminars are also included in this course.

Prerequisite(s): MHT100

MHT108 – TRUCK ELECTRICAL AND ELECTRONICS

120 Contact Hrs (60 Lecture Hours, 60 Lab Hours); 5.0 Semester Credit Hours

This course is designed to provide the student with the necessary skills and knowledge required to identify, service, and repair the different types of electrical and electronic circuits found on late model medium and heavy duty trucks. Operation, diagnosis, and service of the trucks computer systems will be emphasized.

The student will learn to apply Ohm's law to series, parallel and series-parallel circuits and how data is transmitted from the various engine, body, and electronic system sensors to onboard computers that control fuel management, driveability performance, and driver comfort systems.

The student will learn how to diagnose and service electrical and electronic systems using wiring diagrams, manufacturer service manuals, and specialized diagnostic equipment. The student will learn how to properly identify, disassemble, repair as necessary, and assemble connectors and wiring on medium and heavy duty trucks.

Students will learn how to research vehicle service information with computer and internet based electronic retrieval systems. Professional development exercises and seminars are also included in this course.

Prerequisite(s): MHT100, AUX103

AUX124 – SERVICE SHOP MANAGEMENT

120 Contact Hrs (60 Lecture Hours, 60 Lab Hours); 5.0 Semester Credit Hours

This course is designed to provide the students with exposure to an actual shop environment, procedures, and protocol by applying prominent skills obtained in previous courses. This course will also provide the student with an orientation and introduction to the management and business component of the automotive industry. The management and procedures associated with automotive related businesses are emphasized including employee/employer expectations, the service write-up process, business organizational structure, career opportunities, customer relations, personnel management, facilities, business records, insurance, and safety. Knowledge relating to management practices within an automotive business will help the student adapt and acclimate to the working environment.

Students will learn how to complete repair orders containing customer and vehicle information and corrective action. Students will learn how to research vehicle service information with computer and internet based electronic retrieval systems.

Students will learn how to prepare an employment resume and application. Students will learn how to complete various forms used in automotive businesses. Students will learn how to properly interview for employment. Professional development exercises and seminars are also included in this course.

Prerequisite(s): MHT100, AUX103, AUX208

MHT223– PREVENTATIVE MAINTENANCE & WELDING

120 Contact Hrs (60 Lecture Hours, 60 Lab Hours); 5.0 Semester Credit Hours

This course is designed to provide the student with the knowledge and skills necessary to perform service, maintenance, and PM Inspection on medium and heavy-duty trucks and trailers. The student will learn the proper procedures that must be taken to perform a PM Inspection including the completion of PM Inspection forms. The student will learn how a well-planned preventive maintenance program can reduce repair cost and increase the life of the truck, trailer, and other associated equipment.

The student will learn how to properly inspect, lubricate, and repair or replace as necessary; components of the truck drive line as well as checking for proper driveline angles and balance. The student will learn how to perform the proper service, maintenance, repairs and inspection procedures on the trailers lighting system, wheels, tires, brakes and other safety related components as required by law. The student will learn how to disassemble, inspect, service, and reassemble, the fifth wheel. Students will learn how to properly perform the necessary service and maintenance procedures related to pintle hooks and drawbars.

The student will learn how to take the necessary safety precautions as they pertain to cutting, welding and hydraulics. They will learn how to weld with a MIG welder. The student will also learn how to use an oxyacetylene combination torch to cut metal.

Students will also learn how to complete repair orders containing customer and vehicle information and corrective action. Students will learn how to research vehicle service information with computer and internet based electronic retrieval systems. Professional development exercises and seminars are also included in this course.

Prerequisite(s): MHT100, AUX103, MHT106, MHT107

Course Descriptions *Career Programs begin on page 8.*

Welding Courses

WEL110–WELDING AND CUTTING FUNDAMENTALS

120 Contact Hours (60 Lecture Hours/60 Lab Hours); 5.0 Semester Credit Hours

In this course students are introduced to the type of tasks generally performed by welders and how their skills and knowledge are applied to both the construction and manufacturing industries. Because of its importance students will also learn how safety procedures apply to welding and cutting operations. They will also complete a ten-hour OSHA approved safety orientation that explains job site hazards, accident prevention, and standard safety procedures.

Students will learn to set-up and safely use oxyfuel metal cutting equipment and processes. They will then learn to read and interpret welding symbols from construction drawings. These symbols direct the student to use the correct welding procedure to meet the specifications.

Students will learn the classifications and types of welding electrodes used in arc welding. In addition, they will learn the criteria used to select the proper electrode for a specific application. Students will also properly set up SMAW arc welding equipment prior to beginning welding operations. They will learn about the different types of welding equipment and the types of current used in their operation. As a part of learning about the total scope of welding operations, students will be introduced to various welding codes and the agencies that govern these codes. They will see examples of weld imperfections and learn what causes these defects. Students will also be introduced to various weld testing procedures.

Prerequisite(s): None

WEL120–BASIC ARC WELDING PROCEDURES

120 Contact Hours (60 Lecture Hours/60 Lab Hours); 5.0 Semester Credit Hours

This course is a continuation of WEL110/WEL110R Welding and Cutting Fundamentals and introduces new technical information as well as continues to develop fundamental arc welding skills.

As a continuation about the characteristics of metal, students will learn to properly prepare metal for cutting and welding operations. This includes cleaning and grinding operations. They will also learn some of the basic joints used in welding metals together. Students will then use plasma arc cutting equipment to cut metal at a faster rate with a cleaner cut.

As metal is heated and cooled, its characteristics and strength can change considerably. Students learn how metal is formed when it transfers from a liquid to a solid form, what are identifying metal designations and structural shapes and the strength characteristics of various types of metal, and the effect heat has on the strength properties of metal.

Students will be given an opportunity to continue to develop their skills in operating electric arc welding equipment and developing SMAW arc welding control and application techniques. Students are expected to successfully weld weave and overlapping beads, horizontal fillet welds (2F position), vertical fillet welds (3F position), and overhead fillet welds (4F position). In the process they will use fit up gauges and measuring devices to be sure the metal is properly aligned before beginning welding operations.

Prerequisite(s): WEL110

WEL130 SMAW – PLATE WELDING

120 Contact Hours (60 Lecture Hours/60 Lab Hours); 5.0 Semester Credit Hours

In this course, students first learn a new technique for cutting, gouging, and "washing" steel using air carbon arc cutting and gouging equipment.

Students then use the welding techniques they developed in the first two courses and apply them to welding plate metal with open grooves. Students will learn to form grooves in plate metal and setup welding plate using a metal backing.

Students will learn to weld steel plate in a flat V-Groove (1G position), and vertical V-Groove (3G position). Students will also learn to weld V-Groove steel plate in the 1G, and 3G positions.

Prerequisite(s): WEL110, WEL120

WEL140–GMAW/FCAW (MIG) – PLATE WELDING

120 Contact Hours (60 Lecture Hours/60 Lab Hours); 5.0 Semester Credit Hours

This course introduces students to Gas Metal Arc Welding and Flux Core Arc Welding processes used for welding carbon steel plate. Students will learn the similarities and differences for these two processes. They will learn to setup the welding machine, gas flow meter, and welding gun. Students will then practice welding plate in the Fillet Weld positions (1F, 2F, 3F, and 4F) and Open Root V-Groove positions (1G, 2G, 3G, and 4G) using both processes.

Prerequisite(s): WEL110, WEL120, WEL130

WEL150–GTAW (TIG) –WELDING PROCEDURES

120 Contact Hours (60 Lecture Hours/60 Lab Hours); 5.0 Semester Credit Hours

This course introduces students to Gas Tungsten Arc Welding (GTAW) processes. Students will learn the different components of GTAW equipment, the different types of filler metals used, and the types of shielding gases used in the welding process. They will learn to weld sheet steel, aluminum, and stainless steel in several basic joint designs to include butt weld, T-joint weld, and a lap weld.

Prerequisite(s): WEL110, WEL120, WEL130

WEL160–SMAW – PIPE WELDING

120 Contact Hours (60 Lecture Hours/60 Lab Hours); 5.0 Semester Credit Hours

In this course students apply their welding skills to welding large bore pipe. Similar to plate welding, an Open V-Groove is used for welding pipe. Students will learn the process for cutting the V-Groove to prepare pipe for welding procedures. They will also learn to align and clamp pipe in place prior to beginning welding.

Students will then learn to weld steel pipe in a flat (1G-Rotated) position, horizontal (2G) position, multiple (5G) position, and multiple inclined (6G) position using a SMAW open-root, V-Groove welding procedure. Welds will be tested using a destructive type bend test.

Prerequisite(s): WEL110, WEL120, WEL130, WEL140

WEL170–GMAW/FCAW (MIG) – PIPE WELDING

120 Contact Hours (60 Lecture Hours/60 Lab Hours); 5.0 Semester Credit Hours

This course teaches students to set up welding equipment for welding pipe using GMAW and FCAW procedures. Students will apply V-Groove techniques for welding mild steel pipe. They will weld pipe in the 1G-Rotated, and 6G positions for each of the two processes (GMAW and FCAW). Welds will be tested using a destructive type bend test.

Prerequisite(s): WEL110, WEL120, WEL130, WEL140

WEL180–GMAW/GTAW – FABRICATION PROCESSES

120 Contact Hours (60 Lecture Hours/60 Lab Hours); 5.0 Semester Credit Hours

This course applies both GMAW and GTAW welding procedures to various fabrication processes. Students set up equipment to weld various types of sheet metal. Using an assigned project, students will read and interpret drawings, learn to layout, cut and/or correctly apply bend reductions to specifications, and weld joints using weld designs and procedures learned in WEL140 and WEL150. Sheet metal application may be steel, stainless steel, and/or aluminum.

Prerequisite(s): WEL110, WEL120, WEL130, WEL140, WEL150

Electrical Courses

ET101A–BASIC MATH

50 Contact Hrs (36 Lecture Hours, 14 Lab Hours); 2.0 Semester Credit Hours

During this course of instruction, the student will be introduced to school policy, course and grading structure and helpful pointers to develop or improve upon study habits. After successful completion of this mod, the student will be able to compute Whole numbers, Fractions, and Decimal. This course will also develop and foster problem solving skills using Area, Volume, Ratios, Proportions and Units of Measurements as applied in the Electrical industry.

Prerequisite: None

ET102A–ELECTRICAL THEORY I

50 Contact Hrs (36 Lecture Hours, 14 Lab Hours); 2.0 Semester Credit Hours

During this course of instruction the student will be introduced to Electricity Theory. Students will learn about the foundation of electrical theory including the nature of electricity, as in atoms, protons and neutrons. In addition, students will be introduced to Ohm's Law as applied to the electrical industry. Students will learn about the various types of electricity production and distribution. Student will be introduced to basic circuit concepts including series, parallel, combination circuits, and electrostatic theory. Students will also be introduced to Electrical measurements of volts, amps and resistance as related to the Electrical industry. Lastly, students will study electrical conductors and insulators and learn how to properly size and select them for use in circuit installations.

Prerequisite: None

ET103A–ELECTRICAL THEORY II

50 Contact Hrs (36 Lecture Hours, 14 Lab Hours); 2.0 Semester Credit Hours

In this course of instruction the student will continue to learn about basic AC circuits, inductors and capacitors. Students will learn how to compare AC series and parallel circuits containing resistance, inductance, and capacitance. Students will also understand Electrical problems with inductive reactance and capacitive reactance. Students will also learn how to integrate the basics of AC circuit theory as it applies to the electrical industry.

Prerequisite: ET102A

ET104A–ELECTRICAL CODE I

50 Contact Hrs (36 Lecture Hours, 14 Lab Hours); 2.0 Semester Credit Hours

This course introduces the student to the National Electrical Code (NEC). Students will learn about the format, layout, language and terminology used in the NEC and how it applies to the Residential, Commercial and Industrial markets. Students will learn how to navigate through the entire NEC code and understand how to effectively use it as it applies to the electrical industry and particular projects that might be working on. Students will also understand how to use the NEC Table of Contents is as a way to navigate through this comprehensive book used in the electrical industry today.

Prerequisite: None

ET105A–ALGEBRA AND TRIGONOMETRY

50 Contact Hrs (36 Lecture Hours, 14 Lab Hours); 2.0 Semester Credit Hours

During this course of instruction the student will be introduced to basic trade algebra and trigonometry. Students will learn about exponential equations, roots, addition, subtraction, multiplication, and division of polynomials as they apply it the electrical industry. This course will also discuss Pythagorean Theorem including identifying and working with triangles and angles and the related trigonometric functions of Sine, Cosine, and Tangent. Students will also be exposed to problem solving algebraic and trigonometric word problems.

Prerequisite: ET101A

ET106A–ELECTRICAL CODE II

50 Contact Hrs (36 Lecture Hours, 14 Lab Hours); 2.0 Semester Credit Hours

This course is a continuation of Electrical Code I. The students continues to learn about National Electrical Code book (NEC). Students will evaluate each article within the NEC. In addition, students are trained to review each article and learn how to take copious notes that will help them remember key elements of the NEC process. Students learn how the process of evaluation ultimately helps them to gain experience with NEC navigation and understanding of the codes as they relate to the industry. Students are also exposed to scenarios including local code and how local code can have an impact on the NEC and how it applies to the local municipalities.

Prerequisite: ET104A

ET107A–BASIC TELECOMMUNICATIONS

50 Contact Hrs (36 Lecture Hours, 14 Lab Hours); 2.0 Semester Credit Hours

This course is the first of two Telecommunication courses that take the student through the evolution of the Telecommunication Industry from the technological and business perspective and ending with the customer or user experience. Included in this course is Telecommunication electronics, Voice Communications, Data Communications, Wireless Communication, and Network and Broadband Technologies.

Prerequisite: None

ET108A–BLUEPRINT READING

50 Contact Hrs (36 Lecture Hours, 14 Lab Hours); 2.0 Semester Credit Hours

During this course of instruction the student will be introduced to basic Trade Blue Print reading and the language of Blue Print reading as related to the Electrical industry. Students will develop the necessary skill to read and interpret Blue Prints, Students will be trained to have working knowledge and understanding of basic drawing and layout techniques related to blue prints. Students will also be exposed to system of line definition called the Alphabet of Lines used in Blue Print reading. This course will also cover specific Blue Print plans and Maps, such as Plot Plans, Contour Maps, footing drawings, Foundation drawings, Structural steel plans, and Framing Blue Prints. The student will also learn the relationship and importance of understanding Plumbing and HVAC prints and how they relate to the Electrical Blue Prints on a project. Student will develop visualization skills that are needed in the use of Orthographic Projections and drawings as related to the Electrical industry.

Prerequisite: None

ET109A–BASIC ALARM SYSTEMS

50 Contact Hrs (36 Lecture Hours, 14 Lab Hours); 2.0 Semester Credit Hours

During this course of instruction the student will be introduced to Basic Alarm Technology. Students be trained on audio, signaling processing, networking, and various components of alarm and audio systems. Students will also learn about the different types of cable and NEC requirements for installations using s basic alarms. Students will also learn about the various terms and definitions of low voltage systems and finally Security Alarm systems and Access Control systems wiring and installation are also covered in this course.

Prerequisite: None

ET110A–FIRE ACCESS, CCTV SYSTEMS

50 Contact Hrs (36 Lecture Hours, 14 Lab Hours); 2.0 Semester Credit Hours

In this course students learn about Fire Alarm, Security Access and Closed Circuit Television (CCTV) systems. The Fire Alarm portion covers: Types of Fire Alarms, the Fire Command Center, the Annunciator Panel, the Control unit, Alarm Initiating Devices, Notification Appliances and wiring of the input and output devices. The Security Access portion includes: Security Alarm Systems and wiring of Security Systems, Access Control Systems and wiring of Access Systems and the Electrical wiring as it pertains to Security and Access Systems. The Closed Circuit Television includes: CCTV components, CCTV specifications, the transmission link and viewing and recording formats and devices.

Prerequisite: None

ET111A–ELECTRICAL CODE III

50 Contact Hrs (36 Lecture Hours, 14 Lab Hours); 2.0 Semester Credit Hours

This course is continuation Electrical Code II. Students will continue review key articles within the National Electrical Code (NEC). The scope of each article is reviewed and notable points are highlighted. This training approach helps the student gain experience to effectively understand the NEC and develop the necessary skill level for successful maneuvering the NEC Code Book.

Prerequisite: ET104A, ET106A

ET112A–TELECOMMUNICATIONS AND CABLE INSTALLATION

50 Contact Hrs (36 Lecture Hours, 14 Lab Hours); 2.0 Semester Credit Hours

This course is the second of two Telecommunication courses that take the student through the development of the Telecommunication Industry from the technological and business perspective to the customer experience. In addition, students in this course learn about various cabling methods and materials. Student about benefits of copper conductors versus fiber optic conductors. Students also learn about the composition of modern Telecommunications and Data networks.

Prerequisite: None

ET113A–POWER DISTRIBUTION AND LOAD CALCULATIONS

50 Contact Hrs (36 Lecture Hours, 14 Lab Hours); 2.0 Semester Credit Hours

In this course of instruction the students are introduced to the concepts of three phase power and how to perform load calculations. Students will become experienced in the calculations necessary for determining voltage and current values and how to properly connect three phase transformers in various configurations. Students learn the concept of power factor and how to correct it, as well as perform necessary calculations for correction. Upon completion of this course, the student will be able to understand Three Phase Power circuits and their functions and Wye and Delta connections and their functions.

Prerequisite: ET102A, ET103A

ET114A–ELECTRICAL CODE IV

50 Contact Hrs (36 Lecture Hours, 14 Lab Hours); 2.0 Semester Credit Hours

During this course the student continues their study of articles in the National Electrical Code (NEC). The scope of each article is reviewed and notable points are highlighted. The student continues to be given thorough knowledge for navigating through the latest NEC enforceable codes. This process helps the student to gain experience in understanding the NEC that develops skill proper skill level for maneuvering within the code.

Prerequisite: ET104A, ET106A, ET111A

ET115A–MOTOR AND GENERATOR THEORY

50 Contact Hrs (36 Lecture Hours, 14 Lab Hours); 2.0 Semester Credit Hours

This course describes the basic methods for generating electricity and introduces the principles of induced voltage. The parts and process of the generator that produce AC are introduced to the student in this course. The course also covers Three Phase Motors: squirrel cage, wound rotor, and synchronous motors. The student will be introduced to various configurations such as single voltage, dual voltage and wye and delta connected motors are also discussed. Lastly, students are introduced to the process of calculating motor protective devices and wiring methods.

Prerequisite: ET102A, ET103A

ET116A–OHSA 30

50 Contact Hrs (36 Lecture Hours, 14 Lab Hours); 2.0 Semester Credit Hours

During this course of instruction the student will be introduced to OSHA 30 for the Construction Trade. The OHSA 30 program is mandated by State of Connecticut Apprenticeship Board. The OSHA 30 program is a 36 hour course that utilizes education technology to deliver the program. Students utilize an online platform to complete the requirement hours of instruction. Upon successful completion of the course the student will receive the OSHA 30 certification. Topics in this included in the OSHA course: Introduction to OSHA, Managing Safety and Health, Falls, Electrocution, Struck by various falling objects, Trench hazards, Personal Protective Equipment, Health Hazards in construction, Stairwells and Ladders, Confined Spaces, Excavations, Scaffolds, and other construction related safety information.

Prerequisite: None

ET117A–SEMI-CONDUCTORS AND ELECTRONICS

50 Contact Hrs (36 Lecture Hours, 14 Lab Hours); 2.0 Semester Credit Hours

This course introduces the student to semi-conductors and electronics. Students learn about semi-conductors and electronics used within the electrical industry. Students will learn about the various semi-conductor material and construction. The course includes semi-conductors, power rating of components, heat sinks, diodes, rectifiers, transistors, digital logic and circuit design.

Prerequisite: None

ET118–RESIDENTIAL WIRING

50 Contact Hrs (36 Lecture Hours, 14 Lab Hours); 2.0 Semester Credit Hours

During this course various aspects of Residential wiring will be discussed. Instruction and practice working with diagrams and practical applications of the National Electrical Code will prepare the student for entry into the electrical field. Detail instruction will include: installation and calculation of lighting and receptacle branch circuits, installation and calculation of service entrance conductors, installation and calculation of bonding and grounding conductors, installation of ground fault interrupters and arc fault interrupters, and calculation of box fill. The student will learn to draw single pole switch and three way switch wiring diagrams. Hands on skill practice will include the installation of single pole switches, three way switches, ground fault interrupters and arc fault interrupters.

Prerequisite: None

ET119A–INDUSTRIAL MOTOR CONTROLS

50 Contact Hrs (36 Lecture Hours, 14 Lab Hours); 2.0 Semester Credit Hours

In this course students will learn about motor control circuits and controllers. The student will learn and become familiar with components specific to motor control circuits. Student will also be introduced to logic control language, control symbols and ladder diagrams. Students will learn how to interpret and develop control diagrams using motor control logic. Students will also learn motor control troubleshooting techniques.

Prerequisite: ET102A, ET103A

ET120A–PROGRAMMATIC LOGIC CONTROLLERS I

50 Contact Hrs (36 Lecture Hours, 14 Lab Hours); 2.0 Semester Credit Hours

This course is the first of two Programmable Logic Controller courses. Programmable Logic Controllers I introduces the student to Programmable Logic Controllers (PLCs). The student will learn about the history of the PLC, operation and usage of PLCs,

number systems used in the programming of PLCs, PLC programming Logic, and the function of Input modules, output modules, and the PLC processor.
Prerequisite: ET102A, ET103A, ET119A

ET121A–PROGRAMMATIC LOGIC CONTROLLERS II

50 Contact Hrs (36 Lecture Hours, 14 Lab Hours); 2.0 Semester Credit Hours

This course is a continuation of Programmable Logic Controller I. Programmable Logic Controllers II delves into the programming of the PLC. Students are introduced to advanced systems for PLC usage and control programming for the PLC in the electrical industry. The student will learn the PLC instruction set, basic relay instructions, specific relay instructions, building circuits, documenting the PLC system as well as timer and counter instructions and practices.
Prerequisite: ET102A, ET103A, ET119A ET120A

ET122A–PHOTOVOLTAIC I

50 Contact Hrs (36 Lecture Hours, 14 Lab Hours); 2.0 Semester Credit Hours

This course will introduce the students to Photovoltaic System Configurations, site analyses, load analysis, system wiring (inclusive of wire types, wire sizing, overcurrent protection) and grounding requirements as set forth in the NEC. Series and Parallel circuit connections for power and load, installation of all system components and system maintenance. Photovoltaic (PV) I includes Photovoltaic safety, solar fundamentals, PV modules, batteries and charging controllers. Students will learn how to select and install PV systems for use in residential and commercial applications.
Prerequisite: ET102A, ET103A

ET123A–PHOTOVOLTAIC II

50 Contact Hrs (36 Lecture Hours, 14 Lab Hours); 2.0 Semester Credit Hours

Photovoltaic (PV) II will introduce the students to advanced Photovoltaic System Configurations, site analyses, load analysis, system wiring (inclusive of wire types, wire sizing, overcurrent protection) and grounding requirements as set forth in the NEC for large scale applications. Photovoltaic II continues with Inverters, PV wiring per the NEC, solar installations and solar troubleshooting.
Prerequisite: ET102A, ET103A, ET122A

ET124–COMMERCIAL WIRING

50 Contact Hrs (36 Lecture Hours, 14 Lab Hours); 2.0 Semester Credit Hours

During this course various aspects of Commercial wiring will be discussed. Instruction and practice working with diagrams and practical applications of the National Electrical Code will prepare the student for entry into the electrical field. Detail instruction will include: calculating the commercial load, lighting load calculations, determining the number of circuits required, Rigid Metal Conduit (RMC) requirements and installation, Intermediate Metal Conduit (IMC) requirements and installation, Electrical Metallic Tubing (EMT) requirements and installation, Armored Clad cable (AC) requirements and installation, Metal Clad cable (MC) requirements and installation, calculating Feeder size, calculating short circuit amperage, coordination of overcurrent protective devices, and preparing the Panelboard worksheet. Hands on skill practice will include wall projects using MC Cable, and conduit bending.
Prerequisite: None

Medical Assistant Courses

MAP101–INTRODUCTION TO ALLIED HEALTH

120 Contact Hrs (60 Lecture Hours, 60 Lab Hours); 5.0 Credits

This course introduces the student to the world of healthcare. The student will be introduced to basic medical terminology including prefixes, suffixes, word roots, and rules to build, spell and pronounce terms. The course also includes anatomy and physiology basics such as the structural organization of the human body, positional and directional terms. This course introduces the student to law and ethics in the health field. Students will also learn and demonstrate Infection Control, proper techniques to obtain vital signs, HIPAA, and OSHA. Professional development exercises and seminars are also included in this course.
Prerequisite(s): None

MAP110–CARDIOPULMONARY MEDICAL PROCEDURES

120 Contact Hrs (60 Lecture Hours, 60 Lab Hours); 5.0 Credits

This course introduces the student to the anatomy, physiology and medical terms associated with the cardiovascular, blood and respiratory systems. Students will learn the proper technique in blood collection and analysis of the blood sample. They will also learn to prepare a patient for an ECG and obtain an electrocardiogram. Students will learn to measure the peak flow rate and perform spirometry. Professional development exercises and seminars are also included in this course.
Prerequisite(s): MAP101

MAP120–MUSCULOSKELETAL SYSTEM AND MEDICATION ADMINISTRATION

120 Contact Hrs (60 Lecture Hours, 60 Lab Hours); 5.0 Credits

This course introduces the student to the anatomy, physiology and medical terms associated with the Musculoskeletal, Integumentary and Sensory systems. Students will learn to identify the basics of drugs, including sources, uses, pharmacokinetics, and actions. They will also learn to solve medication-related math problems, and administer medications via various routes. Students will discuss medical emergencies such as diabetic emergencies, burns, poisonings, and be trained in BLS (basic life support) for the Health Care Provider. Finally, students will learn to prepare the exam room to assist in a physical exam, including performing vison and hearing screening tests. Professional development exercises and seminars are also included in this course.
Prerequisite(s): MAP101

MAP130–CLINICAL LAB TECHNIQUES

120 Contact Hrs (60 Lecture Hours, 60 Lab Hours); 5.0 Credits

This course introduces the student to the anatomy, physiology and medical terms associated with the Digestive, Urinary and Reproduction systems. Students will learn to examine and report on physical and chemical aspects of urine using CLIA-waived methods. They will also learn to assist providers in specialty examinations including but not limited to obstetrics, gynecology and pediatrics. Professional development exercises and seminars are also included in this course.
Prerequisite(s): MAP101

MAP140–LABORATORY AND SURGICAL PROCEDURES

120 Contact Hrs (60 Lecture Hours, 60 Lab Hours); 5.0 Credits

This course introduces the student to the anatomy, physiology and medical terms associated with the Lymphatic, Immune, Nervous, and Endocrine systems. Students will learn the role of a medical assistant in caring for aging patients along with proper communication with the older adult. They will also learn proper specimen collection and transport in the physician's office laboratory, while performing a variety of CLIA-waived tests. The student will learn the Medical Assistants role in minor surgeries, patient coaching, and nutrition. Students will learn general classifications of surgical instruments, sterilization, and surgical hand scrub. They will also understand the MA's role as a coach in promoting health maintenance and wellness. Professional development exercises and seminars are also included in this course.
Prerequisite(s): MAP101

MAP150–ADMINISTRATIVE MEDICAL OFFICE

120 Contact Hrs (60 Lecture Hours, 60 Lab Hours); 5.0 Credits

Students will learn about the patient's health record, Telephone techniques, and scheduling appointments. A variety of electronic technologies used in the medical office with be discussed. In addition, students will work on their written communication and learn reception and daily operations of the office. This course introduces the student to life cycle of insurance billing and coding. They will learn the basics of health insurance; discuss traditional health insurance and different types of managed care models. Students will then continue the life cycle learning diagnostic and procedural coding basics. Then, continuing onto billing and reimbursement and finally accounting, collections and banking. Professional development exercises and seminars are also included in this course.
Prerequisite(s): MAP101

MAP300–MEDICAL ASSISTING INTERNSHIP

160 Contact Hrs (160 Internship Hours); 3.5 Credits

During the internship the student applies practical application and experiential learning opportunities using all skills learned in a real-life clinical setting prior to taking the certification/registry examination.
Prerequisite(s): MAP101, MAP110, MAP120, MAP130, MAP140, MAP150 must be completed prior to internship.

General Information

The stronger ***your training***, the greater ***your chances for advancement*** in your chosen career field.

General Information

Accreditation

Lincoln Technical Institute is accredited by the Accrediting Commission of Career Schools and Colleges (ACCSC). ACCSC is listed by the U.S. Department of Education as an institutionally recognized accrediting agency. Lincoln Technical Institute is approved by the State of Connecticut Office of Higher Education.

PROGRAM ACCREDITATION

Automotive

- *ASE Education Foundation*

Approvals

- *Registered by the Pennsylvania Department of Education Division of Private Licensed Schools*
- *Licensed by the State of Maine Department of Education*
- *Certificate of Approval from the Delaware Department of Education*
- *Approved by the State of New Jersey Department of Labor and Workforce Development*

Memberships

- *CECU – Career Education Colleges and Universities*
- *BBB - Better Business Bureau*
- *National Association of Student Financial Aid Administrators (NASFAA)*
- *Authorized under Federal law to enroll non-immigrant alien students.*

Veterans Administration Training Program

Lincoln Technical Institute is approved by the Connecticut Office of Higher Education/State Administrating Agency to offer programs to eligible veterans and persons for veterans' benefits. The Veterans Administration handles applications, payment and eligibility information. (Contact the VA at **www.gibill.va.gov** or call **1-888-442-4551**.)

Veterans benefits may require full onground attendance throughout the program. See your campus financial aid and veterans benefits advisor for attendance requirements.

Statement of Ownership

Lincoln Technical Institute is owned and operated by NN Acquisition, L.L.C., a wholly owned subsidiary of Lincoln Educational Services Corporation. The major officers and administrators of the corporation are:

Scott M. Shaw, *President & CEO*
Brian K. Meyers, *Executive Vice President & CFO*
Alexandra M. Luster, *Corporate Secretary*

Notice to Students

1. Applicants interested in training in our Career Fields should be aware of the job duties they may need to be capable of performing prior to enrollment. These can be found on the O*NET Online website at www.onetonline.org. O*NET Online is sponsored by the U.S. Department of Labor, Employment & Training Administration, and developed by the National Center for O*NET Development.
2. Criminal records and/or certain background issues may present a barrier to employment in certain fields. Applicants may be denied admission as a student if after screening it is determined that employment after graduation is not possible due to background issues.
3. An "Acknowledgement of Random Drug Testing, Criminal Background Checks, Driving Records Check, Age Restrictions, Immunization and Health Records" form must be signed during the enrollment process.

Nondiscrimination and Harassment Policy

Lincoln Technical Institute (LTI) steadfastly opposes all forms ofLincoln Technical Institute is committed to maintaining an educational and work environment free from discrimination and harassment based on age, race, color, sex, gender, sexual orientation, religion or creed, national or ethnic origin, or disability. Lincoln Tech, in accordance with applicable federal laws including Title IX of the Education Amendments of 1972 and 34 C.F.R. Part 106, does not discriminate on the basis of any of the listed protected categories, including in admissions and employment, nor will it permit or tolerate discrimination or harassment against a student, employee, or other member of the Lincoln Tech community.

All students and employees are expected to comply with Lincoln's Nondiscrimination Policy and Title IX Policy. Any inquiries regarding these policies and procedures can be directed to the Title IX/Equity Coordinator as provided below, the Office for Civil Rights, at the U.S. Department of Education, at https://www.ed.gov, or both.

This Policy does not specifically address any applicable state laws on sexual harassment. Lincoln Tech retains the right to revise its policies and procedures in light of any changes to applicable law.

To view the entire Nondiscrimination policy, please visit: NonDiscrimination Policy

To view the entire Title IX policy, please visit: Title IX policy

Admissions Policies

Invest in yourself!

An education is one of the best investments you can make, and can pay valuable dividends over your entire lifetime.

Admissions Policies

Admission Procedures

Persons desiring to make application for admission should contact the School directly, or speak with an Admissions Representative. Applicants must:

1. Be interviewed by an Admissions Representative or other member of the School staff.
2. Complete an Enrollment Agreement (Student Contract).
3. Submit information which may be required to determine individual qualifications by program such as, but not limited to, proof of high school diploma or equivalent.
4. Complete any required entrance examination or learner assessment, if applicable.

Admission Requirements

In order to be considered for acceptance, an applicant must meet the following requirements:

- Be a high school graduate or possess a state-approved high school equivalency assessment including, but not limited to: a GED, HiSET or TASC examination; or possess an associate's degree or higher from an accredited institution.
- Complete the Learner Assessment to determine readiness for academic success.
- Have reliable internet connectivity and access to a device that meets the minimum systems requirements. See your Admissions contact for current systems requirements.
- Provide a fully executed Enrollment Agreement.

Introductory Period of Enrollment

Lincoln Technical Institute is offering new students at this campus an opportunity to enroll under an introductory period of enrollment. During this introductory enrollment period, which is applicable to all programs, students will be able to attend the school for 10 calendar days, including weekends and holidays, without any tuition obligation to Lincoln Technical Institute. If a student attends any scheduled class after the 10th calendar day, the introductory period will be concluded. Those students who do not attend after the 10th calendar day will be considered cancelled and will not have any tuition obligation to Lincoln Technical Institute.

Students who choose not to continue their enrollment at Lincoln Technical Institute during the introductory period, will be charged for all books, uniforms, tools, and equipment not returned in new condition to the school. Further, the school application or registration fee is non-refundable if a student decides to withdraw from Lincoln Technical Institute during the introductory period of enrollment.

Lincoln Technical Institute reserves the right to withdraw a student prior to the conclusion of the introductory period of enrollment due to violations of the institution's attendance policy or student code of conduct.

International Students

International students must meet the same admission requirements as U.S. citizens. Students are also required to provide the secondary school transcript with an English translation of the transcript in addition to other requirements. The school recommends contacting Admissions for additional information.

Financial Information

Most students who attend LTI benefit from some type of ***financial aid.***

Financial aid is available to those who qualify.

Financial Information

Financial Aid

Lincoln Technical Institute has a full-time Financial Aid Office available to assist students who qualify with their financial needs. Our Financial Aid Advisors will assist each applicant in determining the amount and type of financial aid available.

LINCOLN BRIDGING THE GAP GRANT

The Lincoln Bridging the Gap Grant is available to eligible full time, students who have remaining financial need for direct costs after exhausting all available student aid.

Eligibility for this program is determined based on the following criteria:

- Confirmed enrollment in an approved program of study
- Completed FAFSA for the applicable award year with an official Estimated Family Contribution (EFC)
- Acceptance of all available student aid from federal, state and other sources.
- Remaining financial need for direct costs (tuition and fees) greater than $500 after all other sources of student aid have been exhausted.

The Lincoln Bridging the Gap Grant awards will vary depending on each applicants' determined institutional need. This grant does not carry any cash value.

The grant is awarded in up to two disbursements per academic year. Due to limited funding, not all students who are eligible will receive this award and the grant program may not be available each academic year.

VA PENDING PAYMENT COMPLIANCE

In accordance with Title 38 US Code 3679 subsection (e), this school adopts the following additional provisions for any students using U.S. Department of Veterans Affairs (VA) Post 9/11 G.I. Bill® (Ch. 33) or Vocational Rehabilitation and Employment (Ch. 31) benefits, while payment to the institution is pending from the VA. This school will not:

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

However, to qualify for this provision, such students may be required to:

- Provide Chapter 33 Certificate of Eligibility (or its equivalent) or for *Chapter 31, VA VR&E benefits must be approved by VR&E counselor and the authorization must be uploaded to Tungsten by the first day of class.*

  Note: Chapter 33 students can register at the VA Regional Office to use E-Benefits to get the equivalent of a Chapter 33 Certificate of Eligibility.

  School Certifying Official will receive a system-generated email indicating an Authorization is available in the Tungsten Network.
- Provide written request to be certified;
- Provide additional information needed to properly certify the enrollment as described in other institutional policies.

G.I. Bill® is a registered trademark of the U.S. Department of Veterans Affairs (VA). More information about education benefits offered by VA is available at the official U.S. government website at www.benefits.va.gov/gibill.

FRIENDS AND FAMILY EDUCATION GRANT

The *Friends and Family Education Grant* is designed to provide financial assistance to students who are connected to our graduates or employers/partners.

In order to apply for this grant, an eligible student must:

- Applicants must submit contact information of their connection to a Lincoln Tech employer/partner/graduate;
- Complete the application process to enroll;
- Complete the Free Application for Federal Student Aid (FAFSA);
- Submit your Lincoln Grant request form to the financial aid staff or email: scholarships@lincolntech.edu;
- Must start training program by December 31, 2024 (see campus personnel for eligibility after this date);

Those students awarded a grant must maintain satisfactory academic progress and also must attend the Lincoln Financial Literacy presentation within six weeks of enrollment.

Each eligible student may apply for one grant with an award of $1,000. The grant will be prorated over the entire length of his/her program. Applications can be submitted any time prior to enrollment periods established by the school of your choice. The grant will not be awarded to any student who defers their enrollment past the requisite time period.

Types of Financial Aid Available to Students

FEDERAL STAFFORD LOANS (SUBSIDIZED)/DIRECT

These low-interest loans are made to students attending school at least half-time by the U.S. Department of Education. Eligibility is based upon financial need. Students must repay this loan. The Interest on the loan will be paid by the U.S. Department of Education until the student graduates or separates from school. At that point the interest becomes the responsibility of the student. The student may make payment while he/she is in a grace period or the interest will be accrued and capitalized at the end of the student's grace period.

FEDERAL STAFFORD LOANS (UNSUBSIDIZED)/DIRECT

These low-interest loans are generally made to "independent" students attending school at least half-time by the U.S. Department of Education. Students do not have to demonstrate financial need to obtain this loan. Although the loan goes into repayment six months after the student's last day of attendance, interest begins accruing as soon as the funds are disbursed.

FEDERAL PLUS LOANS

These loans enable parents without adverse credit to borrow for each "dependent" student enrolled at least half-time. Similar to Federal Stafford Loans/Direct, these loans are made by the U.S. Department of Education. The yearly loan limit is your cost of education, minus any estimated financial aid you're eligible for. Repayment begins within 60 days after the final disbursement of the loan.

PELL GRANTS

Pell Grants are awards that do not have to be repaid. The award amount varies depending on a student's eligibility and the amount of aid available as determined by the U.S. Department of Education guidelines. Eligibility is based upon financial need.

FSEOG (FEDERAL SUPPLEMENTAL EDUCATIONAL OPPORTUNITY GRANTS)

These funds are allocated by the U.S. Department of Education and are limited. Funds are awarded to students with "exceptional financial need" and do not have to be repaid.

FWS (FEDERAL WORK-STUDY PROGRAM)

The Federal Work-Study Program allows eligible students to work part-time to help with a portion of their expenses. These funds are allocated by the Federal Government and are limited. Once a student starts school, an application for a work-study position may be accepted.

Other Financial Aid

Other sources of funds may be available to students who qualify including private loans and scholarships. Please contact the Financial Aid Office for further information and refer to the Catalog Addendum for the latest scholarship offerings, if applicable.

Tuition and Other Expenses

TUITION

Tuition, fees and tool costs vary by program. Please see attached schedule of fees addendum for current information.

TOOLS

All tools and materials for the programs must be purchased by the student. Special tools to be used in the program are supplied by the school on a loan basis. To be employable in industry, a graduate must be equipped with his own basic set of hand tools.

If the student does not already have his own tools, they can be purchased from the school or purchased from any outside source of the student's choice. The school cannot assume responsibility for the student's property on or off the school premises. Any student enrolled in the Automotive, Diesel or Collision programs and starting classes after January 2, 2023, will be receiving MATCO tools from Lincoln Tech in the very early stages of the curriculum to be used in your program of study. This MATCO tool program will replace any process previously described or offered through Lincoln Tech.

EDUCATIONAL EQUIPMENT

A portable student owned device (i.e. a laptop) smartbook or laptop is required in order to access the course companion platform utilized for classroom instruction. There are minimum system requirements that these devices must meet for the learners to have a positive experience. See your Campus Representative to inquire about the programs that require devices and the related minimum systems requirements necessary to access the program course companion platform.

Cancellation and Refund Policy

An applicant may cancel his/her enrollment at any time before the commencement of classes. An applicant who wishes to cancel his/her enrollment should submit in writing to the Director of Admissions his/her intention of canceling from the school. The statement should be signed and dated by the applicant. If an applicant cancels within three business days after signing an enrollment agreement and making an initial payment, but prior to entering the program, he/she is entitled to a refund of all monies paid. If an applicant cancels more than three days after signing an enrollment agreement and making an initial payment, but prior to entering the program, he/she is entitled to a refund of all monies paid except the registration fee. Applicants who have not visited the school prior to enrollment will have the opportunity to cancel without penalty within three business days following either the regularly scheduled orientation procedures or following a tour of the facilities and inspection of equipment where training and services are provided.

REGISTRATION FEE, STUDENT FEE, UNIFORM FEE, TECHNOLOGY FEE, PARKING FEE, BOOK & TOOL REFUND POLICY

Students who cancel enrollment or withdraw after receiving books and supplies may return these items if they are in good condition within five (5) days following a cancellation notice or twenty (20) days following date of withdrawal. Any refund due for parking fees, student fees or technology fees will be prorated based on use.

Withdrawal and Institutional Refund Policy

A student who wishes to withdraw his/her enrollment should submit in writing to the Campus President or Director of Education his/her intention of withdrawing from the Institute. The statement should be signed and dated by the student. The official withdrawal date is the date the student begins the Institute's withdrawal process by verbally informing the appropriate school official, the date the Institute receives the official withdrawal notification or the date the student is administratively withdrawn. The date under these circumstances is considered to be the Date of Determination of the withdrawal.

A student who stops attending and fails to notify the Institute will be unofficially withdrawn. The date under these circumstances is considered to be the Date of Determination of the withdrawal.

If a student officially or unofficially withdraws or is terminated before the completion of 100% of the total program, the following tuition charges will apply based on the percentage of total program completion through the Date of Determination.

PERCENTAGE OF TOTAL PROGRAM COMPLETION THROUGH THE DATE OF DETERMINATION	PERCENTAGE OF TOTAL PROGRAM TUITION CHARGED
FIRST WEEK	5%
WEEK TWO–10%	10%
10.01%–25%	25%
25.01%–50%	50%
50.01%–75%	75%
75.01%–100%	100%

Once accepted by the student, uniforms and tax are considered used and cannot be returned. Testing (if applicable), technology, and parking fees are non-refundable after the start of class. Students whose tuition is paid by a third party funding agency should check with the Institute's Student Accounts Office for the refund policy that may pertain to their contract. All charges will be determined based upon the student's actual last date of attendance at a documented academically related activity and any resulting refund will be made within thirty (30) days of the Date of Determination.

Return of Title IV Funds Policy

Federal regulations regarding repayment of Federal Financial Aid has changed the formula for calculating the amount of aid a STUDENT may retain when a STUDENT withdraws. STUDENTS who withdraw from all classes prior to completing more than 60% of an enrollment term will have their eligibility for Federal Aid recalculated based on the percentage of the term completed, which shall be calculated as follows:

$$\frac{\text{\# of calendar days completed by student}}{\text{total \# of calendar days in term}}$$

The total number of calendar days in a term excludes any scheduled breaks of 5 days or more.

The Return to Title IV calculation will exclude any break days longer than five. If a student eligible for financial aid attends one day or more, the institution is required to complete a Return to Title IV calculation. Funds will be returned to the federal government if what was received is more than the student is eligible to retain. If the funds received are less than what the student is eligible to retain, the student may qualify for a post-withdrawal of funds. A post-withdrawal is the ability for a student to receive funds after they have ceased attending school. If the student or parent qualifies, they will be notified in writing, indicating the steps required to be completed.

**Please note that students are responsible for any balance owed to LTI as a result of the repayment of Federal Aid funds.*

Refunds will be processed and sent to pupil no later than thirty (30) days after the school determined withdrawal date.

The Refund Process

The Return to Title IV calculation will exclude any break days longer than five. If a student eligible for financial aid attends one day or more, the institution is required to complete a Return to Title IV calculation. Funds will be returned to the federal government if what was received is more than the student is eligible to retain. If the funds received are less than what the student is eligible to retain, the student may qualify for a post-withdrawal of funds. A post-withdrawal is the ability for a student to receive funds after they have ceased attending school. If the student or parent qualifies, they will be notified in writing, indicating the steps required to be completed.

1. Unsubsidized Federal Direct Loan
2. Subsidized Federal Direct Loan
3. Federal Direct Plus Loan
4. Federal Pell Grant
5. Academic Competitiveness Grant (ACG)
6. Federal Supplemental Educational Opportunity Grant (FSEOG)

Lincoln Technical Institute will distribute any refund proceeds from step two in the following manner. Reduce the outstanding Federal loan obligation first in the order listed above. The student's eligibility for a state grant and agency funding will be calculated independently of the refund process upon the student's withdrawal from school.

If a credit balance still remains after the above process has been completed, the school will honor the student's authorization to reduce their Federal loan obligation. If the school does not possess a Federal loan reduction authorization, the remaining credit balance will be returned to the student.

Veterans Affairs Refund Policy

1. Each postsecondary educational institution shall have a policy for refunds which at least provides:
   (a) That if the institution has substantially failed to furnish the training program agreed upon in the enrollment agreement, the institution shall refund to a student all the money the student has paid.
   (b) That if a student cancels his or her enrollment before the start of the training program, the institution shall refund to the student all the money the student has paid, minus 10 percent of the tuition agreed upon in the enrollment agreement or $100, whichever is less.
   (c) That if a student withdraws or is expelled by the institution after the start of the training program and before the completion of more than 60 percent of the program, the institution shall refund to the student a pro rata amount of the tuition agreed upon in the enrollment agreement, minus 10 percent of the tuition agreed upon in the enrollment agreement or $100, whichever is less.
   (d) That if a student withdraws or is expelled by the institution after completion of more than 60 percent of the training program, the institution is not required to refund the student any money and may charge the student the entire cost of the tuition agreed upon in the enrollment agreement.
2. If a refund is owed pursuant to subsection 1, the institution shall pay the refund to the person or entity who paid the tuition within 15 calendar days after the:
   (a) Date of cancellation by a student of his or her enrollment;
   (b) Date of termination by the institution of the enrollment of a student;
   (c) Last day of an authorized leave of absence if a student fails to return after the period of authorized absence; or
   (d) Last day of attendance of a student, whichever is applicable.
3. Books, educational supplies or equipment for individual use are not included in the policy for refund required by subsection 1, and a separate refund must be paid by the institution to the student if those items were not used by the student. Disputes must be resolved by the Administrator for refunds required by this subsection on a case-by-case basis.
4. For the purposes of this section:
   (a) The period of a student's attendance must be measured from the first day of instruction as set forth in the enrollment agreement through the student's last day of actual attendance, regardless of absences.
   (b) The period of time for a training program is the period set forth in the enrollment agreement.
   (c) Tuition must be calculated using the tuition and fees set forth in the enrollment agreement and does not include books, educational supplies or equipment that is listed separately from the tuition and fees.

General Student Information

General Student Information

School Facilities

Lincoln Technical Institute is a 315,000 square-foot facility on 40 acres in the town of East Windsor, Connecticut. This facility is conveniently located off Interstate 91 (Exit 44) just north of Hartford, the capitol city, and Bradley International Airport. Springfield, Massachusetts is just a few exits to the north. The facility contains 30 classrooms, 2 fully-equipped computer labs, a learning resource center, an auditorium, administrative offices including financial aid, admissions, student services, career services, a fully functional cafeteria and over 260,000 square feet of practical shop space. The shop space contains fully equipped training areas. Parking is available for over 800 vehicles.

Personal Security

Although the Institute's staff does as much as possible to ensure everyone's safety, always use prudent common sense, such as:

1. Lock your automobile.
2. Secure personal belongings appropriately.
3. At night, walk in pairs to classes or automobiles.

Handicapped Facilities

There are designated handicapped parking spaces available. Please discuss any other special services that might be needed with your Admissions Representative or the Director of Student Services.

Learning Resource Center

At Lincoln, we are dedicated to providing students with learning resources that enhance their educational journey and career readiness. Our learning resource system includes a wealth of online tools and facilities. Central to this system is our Learning Resource Center ("LRC") that offers students access to a vast collection of online databases covering hundreds of subjects that are available 24/7. These databases house a variety of digital materials, including eBooks, scholarly journals, market reports, dissertations, working papers, streaming videos, and electronic journals. Both our online and campus-based LRC offer a focused setting to enhance the overall learning experience.

Career Services

Lincoln Technical Institute does not guarantee job placement. However, it does provide employment assistance to its current students and graduates by means of the following services:

- Advises industry leaders of the availability of the school's students and graduates through regular contact, including several scheduled Career Days per year.
- All of the students attending the Lincoln Tech campus will participate in our Lincoln Edge Program. Lincoln Edge is a combination of interactive workshops and online services that deliver professional skills training on topics like resumé building, personal development, setting goals, job search and interviewing strategies. Students will have a dedicated portal where they can access an array of professional services even after they have graduated from Lincoln Tech! We are dedicated to ensuring that we not only provide our students with the skills they need to perform on the job, but the skills they need to build a lifetime career.
- Provides additional assistance if desired.

Other Services

Students needing help due to health or other special problems should contact the Education Department Staff to be referred to the proper local professional services.

Student Housing

Lincoln Technical Institute has shared independent housing options to offer housing within a convenient distance to the school. Anyone interested in housing should contact their Admissions Representative or Admissions Director by calling the school. There are also other accommodations located within a reasonable distance from the school.

Documented Immunization

In accordance with Connecticut Public Health Act 89-90, all higher education institutions require each matriculating student born after December 31, 1956, to provide proof of adequate immunization against measles, mumps and rubella. The State of Connecticut requires two inoculations. The first dose given after 12 months of age and after January 1, 1969. The second dose must have been given on or after January 1, 1980. In accordance with Public Act 01-93, beginning in 2002, all higher education institutions require each residential/dormitory student to be vaccinated against meningitis.

To be exempt from inoculation at the Institute, students may (a) provide a statement that he or she graduated from a Connecticut high school during or after 1999; (b) present a certificate from a physician stating the immunization is medically contraindicated; (c) provide a statement that such immunization is contrary to religious beliefs; or (d) present a certificate from a licensed physician that the student has already had a confirmed case of such disease and is therefore immune.

This policy is inclusive to those students requesting dormitory housing.

Inclement Weather

In the case of inclement weather or hazardous conditions, an announcement will be made via the LincAlert system. Announcements may include plans for distance learning, delayed start time or early dismissal of class, class cancellation, or school closure.

Student Complaint/Grievance Procedure

Conflicts are best resolved when people utilize basic communication skills, common sense, and discretion. A student whose views differ from those of an instructor should first try to resolve the difference with the instructor involved. If a satisfactory solution cannot be obtained, the student should request an interview with the Department Manager. Students who have concerns of a non-academic nature are urged to consult with the office of the Campus President. This office will refer the student to the proper department and will assist the student as necessary. If a student does not feel that the school has adequately addressed a complaint or concern by following the above measures, the student may consider contacting:

LINCOLN EDUCATIONAL SERVICES
PROBLEM RESOLUTION HOTLINE
1-800-806-1921

CONNECTICUT OFFICE OF HIGHER EDUCATION
450 COLUMBUS BOULEVARD
HARTFORD, CT 06103
(860) 947-1816

General Student Information

Lincoln Technical Institute is licensed by, and complies with the Rules and Regulations of the State Board of Private Licensed Schools. Questions or concerns that are not satisfactorily resolved by the School's Campus President or by other School officials may be brought to the attention of the State Board of Private Licensed

Schools, Pennsylvania Department of Education, 333 Market Street, 12th Floor, Harrisburg, PA. 17126-0333.

ACCSC STUDENT COMPLAINT 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 reviewed by the Commission must be in written form and should grant permission for the Commission to forward a copy of the complaint to the school for a response. This can be accomplished by filing the ACCSC Complaint Form. 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:

ACCSC
Accrediting Commission of Career Schools and Colleges

ACCREDITING COMMISSION OF CAREER SCHOOLS AND COLLEGES
2101 WILSON BOULEVARD, SUITE 302
ARLINGTON, VA 22201
(703) 247-4212
www.accsc.org | complaints@accsc.org

A copy of the ACCSC Complaint Form is available at the school and may be obtained by contacting complaints@accsc.org or at https://www.accsc.org/Student-Corner/Complaints.aspx.

The federal contact for student loan issues is:

POSTAL MAIL	U.S. Department of Education FSA Ombudsman Group P.O. Box 1843 Monticello, KY 42633
PHONE	1-877-557-2575
FAX	606-396-4821
WEB	https://studentaid.gov/feedback-center/

Students have the right to file a complaint with the U.S. Department of Education concerning alleged failures by Lincoln Technical Institute to comply with the requirements of FERPA. The name and address of the office that administers FERPA is:

FAMILY POLICY COMPLIANCE OFFICE
U.S. Department of Education
400 Maryland Avenue, SW
Washington, DC 20202

Official Student Communication

Lincoln Technical Institute's official web-based student portal (Lincoln's Student Portal) and student email accounts are an official means of communication to all full and part-time students enrolled in credit bearing classes. All students are required to access the Lincoln Student Portal and @mylincoln email accounts. accounts. Official LTI communications may include, but are not limited to, registration information, reminders of important dates associated with key financial aid and financial obligations as well as academic progress notifications.

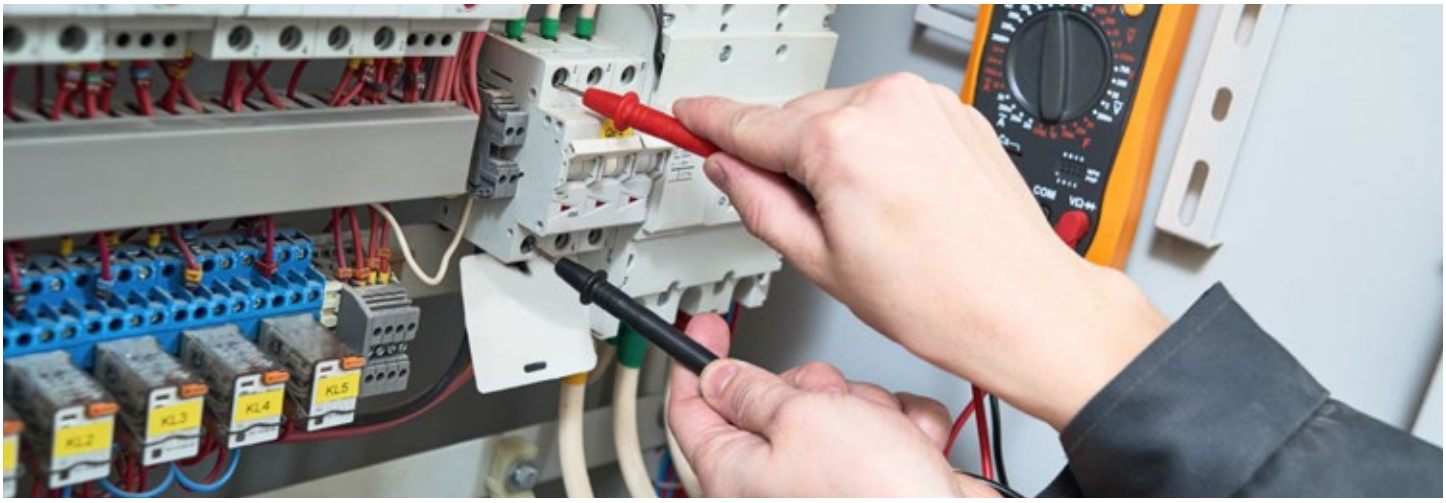
Lincoln Technical Institute expects that students shall receive and read their electronic communications on a frequent and timely basis. Failure to do so shall not absolve the student from knowing of and complying with the contents of all electronic communications, some of which will be time-critical.

Emergency Preparedness

Emergency preparedness information can be obtained in the following link:
https://www.lincolntech.edu/download/consumer/HS_ERP.pdf

Visitors

Parents and other interested persons are welcome to call at any time to confer with School authorities, to inspect the School facilities, or to seek advice on the future career of an enrolled student. Visitors will find a cordial reception at Lincoln Technical Institute. A previously made appointment would be appreciated. In keeping with Lincoln's safety procedures, all visitors must sign in at the front desk upon arrival to the school and are issued a visitors badge.



Academic Information

Academic Information

Class Schedules

Students can enroll at any time during the year. Class starting dates are scheduled at frequent intervals to enable students to start moving toward their career goals as soon as possible. Class size is limited so that each student can receive the personal attention so vital to successful mastery of the skills and understanding of the subject at hand.

A typical classroom at our campus can accommodate up to 30 students and a typical laboratory at our campus can accommodate up to 30 students.

The school reserves the right to alter hours of attendance and/or starting dates when deemed necessary. Such changes will not alter the program costs or refund policy stated in the enrollment agreement. If conditions beyond the control of the school require postponement of a starting date or temporary suspension of classes, appropriate adjustments will be made to provide students all the instruction to which they are entitled under the terms of the enrollment agreement. Students who have enrolled but have not started attending school will, upon request, be issued a refund of monies paid if postponement of classes extends beyond the next class starting date.

Diploma Programs

For the person wanting comprehensive training geared towards succeeding as a professional technician, the school offers diploma programs which prepare students for entry-level positions in their chosen field.

Rules and Regulations for the conferred diploma are in accordance with the state of Connecticut.

For a description of the subject matter covered in each course, please refer to the curricula on pages 8 through 24.

Student Conduct

Students are required to comply with all Student and Safety Regulations. Failure to adhere to and observe School Regulations and Policy may result in probation or immediate dismissal. Conduct which may be considered unsatisfactory includes but is not limited to the following:

- Excessive absenteeism, tardiness or leaving class early. Students are also expected to put forth a reasonable effort to learn. Acts such as loafing, horseplay, failure to pay attention and carry out instructions, or poor attendance are not tolerated. Students who arrive after the official school starting time will be considered as late. If a student must leave prior to the official end of class time, he/she must notify the instructor and/or Education Department. Class attendance is closely monitored by the school, and unless, they contact the school first, students who are absent from class will be contacted.
- Student conduct which disrupts classes or interferes with the progress of other students.
- Theft of property belonging to the School, other students or employees. (In addition to termination, theft may be reported to civil authorities.)
- Any act resulting in defacing or destruction of School property and/or property of others including other students.
- Fighting in or near the school premises.
- Possession or consumption of alcohol, marijuana or illegal substances on or near school premises. Possessing firearms, fireworks, ammunition, or weapons is a violation of schools rules and state laws. (In addition to termination, illegal substance abuse will be reported to proper authorities.)
- Personal conduct at any time or place which may, in the judgment of the School staff, cast a bad reflection on the School and its well-earned reputation.
- We oppose all forms of unlawful discrimination and harassment in the school environment. Harassment and discrimination can take many forms including but not limited to, racial slurs, ethnic jokes, disparaging or insensitive remarks about an individual's religion, age, gender, physical ability or sexual orientation, physical or verbal threats, or sexual harassment. None of these, or any other form of harassment, including cyber-bullying, or discrimination is acceptable in the school environment. All allegations of harassment or discrimination are fully investigated. Students found to have engaged in this behavior are subject to disciplinary action up to and including expulsion from school.
- Any student creating a hazard; immoral conduct, or disturbance in the surrounding neighborhood. Reckless driving and/or squealing tires near the school or places of residence are prohibited.
- The campus computer systems and networks are provided for student use as a part of the academic program. All students have a responsibility to use Lincoln Educational Services computer systems and networks in an ethical and lawful manner. The intentional misuse and abuse of computer and Internet resources is not permitted. This includes, but is not limited to, purposely visiting inappropriate and non-academic Web sites which promote or advocate illegal or unethical behavior; visiting inappropriate and nonacademic Web sites for personal business; downloading graphics or other pictures, images, or information not related to academic curricula; inappropriate and non-academic use of email; inappropriate and non-academic use of chat rooms; and inappropriate and non-academic use of school software.
- In keeping with accepted industry and shop safety hazards, jewelry must be evaluated for safety risks when in the lab or shop. Hanging earrings, necklaces, rings, or bracelets may pose a safety risk. If in the judgment of school staff, a safety hazard exists, a jewelry item in question must be either removed or covered with protective clothing.
- The campus has an established dress code for students in all programs which is in accordance with industry expectations and in consideration of professional standards.
- We expect honesty from students in presenting all of their academic work. Students are responsible for knowing and observing accepted principles and procedures of research and writing in all academic work, including term paper writing, lab manual and/or workbook completion and test taking.
- Misrepresenting the school's programs, policies, or activities of members of the staff or of other students is prohibited.
- Cell phones and/or other electronic recording or communication devices are not allowed to be operated in any classroom or lab area without the expressed permission of the instructor.

Attendance

The technical nature of the training and graduate employability goals of the programs offered requires that students attend classes on a regular basis. Our expectation is that students will attend all sessions for courses in which they are registered. Class attendance is monitored daily commencing with the student's first official day of attendance and a student will be considered withdrawn from a course or courses when any of the following criteria are met:

- The fourteenth consecutive calendar day of absence (two weeks) with the exception of published holidays and breaks
- Cumulative absences prevent the student's ability to master the course content during the remainder of the scheduled course, term, or semester as determined by the course syllabus.

Approved employment interviews (established per school policy) are not counted as absences for attendance purposes.

Students receiving funds from any state or federal agency may be subject to the additional attendance requirements of that specific agency.

A Pending Course Schedule (PCS) student status is a

temporary period of non-attendance not to exceed a maximum of 60 calendar days. The status is intended to support student progression and is applied when a student has a course that is not available due to, but not limited to, interruption in their enrollment because of a course failure, a shift change, a leave of absence, or failure to meet graduation requirement. The PCS status is not included in the 150% maximum timeframe calculation.

Note: Calendar day calculations include all days visible on a calendar without exception.

Attendance for Blended Programs

Blended courses consist of both classroom and online instruction. Students are expected to adhere to the attendance policy through physical attendance in scheduled class sessions AND through online graded assignments submitted weekly. Timeframes for weekly online submissions are designed in the Canvas Course Shell (i.e. Sunday - Saturday). Threaded discussions and reflection exercises are examples of graded assignments used to record weekly attendance for the online portion.

Sending an email to the instructor does not count as an academic activity or a gradable item. Meeting the attendance requirements does not indicate that the student has completed all of the required class work for a particular week. Meeting the attendance requirements indicates only that the student has participated sufficiently to be considered in attendance for that week. Assignments are graded on their merit and according to the established guidelines.

BLENDED DELIVERY METHOD TECHNICAL REQUIREMENTS COMPUTER REQUIREMENTS FOR BLENDED DELIVERY ONLINE COURSES

The minimum system requirements are meant to serve as a guideline for what is acceptable to access the online courses using technology.

Minimum System Requirements:

- Microsoft Office 2016 or Higher
- Windows 10 Operating System
- 4G RAM minimum
- 40GB of AVAILABLE hard-disk space
- Speakers and Sound Card
- High speed connection to the Internet (DSL, Cable)

Supported Browsers: *(These requirements are subject to change. In each case, the latest two versions of each browser should be supported unless more specific requirements are outlined in your program. It is recommended that students have at least two of these available on their systems.)*

- Internet Explorer 11, Microsoft Edge
- Firefox (Latest version recommended)
- Chrome (Latest version recommended)
- A user risks running into problems with the course software if they choose to use a non-supported browser

Browser settings:

- Java Script should be enabled
- Cookies should be enabled
- Allow Pop-Up in windows

The following plug-ins are required for many of the resources available in your online courses:

- Adobe Flash Player
- Adobe Acrobat Reader
- Java 1.5 or higher

Make-Up

Upon return to school following an absence, students are required to turn in any work that was due while they were absent in order to receive up to the original 100% credit. A reduction in credit for make-up work will be applied to all late submissions based on the following criteria:

- Up to 90% credit for all work turned in up to one week late from the date of your return.
- Up to 80% credit for all work turned in up to two weeks late from the date of your return.
- Any work turned in after two weeks late will receive a grade of 0%.

Availability for make-up on high stakes assessments (e. g. mid-terms and final exams) may be limited, and the date and time of make up on high stakes assessments must be agreed upon by faculty. Regardless of the timeframes referenced above, all work must be completed in a timely manner in order to process final grades, grade appeals and/or to resolve incomplete grades.

Any exceptions due to extenuating circumstances are managed at the discretion of the Director of Education and/or the Campus President. Documentation may be required to justify extenuating circumstances.

In the case of school closure due to inclement weather or other natural disaster, make-up sessions will be scheduled to present and/or review material not incorporated into the remaining scheduled days. The campus will attempt to schedule make-up classes at times that fit within the students' schedule.

Consultation and Tutoring

Students and graduates may consult with the School faculty at any time about program or course problems. Students who require additional assistance with their work may obtain individual tutoring from the faculty outside of class hours. Arrangements for special tutoring must be made with the campus Education Department.

Student Advising

The Education Department monitors student success as measured by student attendance, student learning, professionalism, academic progress, and achievement of career goals. As a student service, Department personnel engage active students in advising sessions to mitigate obstacles or challenges, identify additional needed supports or services, and promote student success. Students are encouraged to call upon staff to address academic or non-academic concerns. Matters of a personal nature that distract the learning experience may be addressed through advising practice or through referral to qualified professionals in the local community. Good communication is imperative for effective advising; therefore, active students are asked to inform staff of any changes to their records including phone, home address, e-mail, employment, marital status, and so forth.

Americans with Disabilities Act (ADA) Policy

Lincoln Technical Institute (LTI) is committed to providing opportunities for all qualified students to participate in its programs, including students with disabilities who need reasonable accommodations. A qualified student is one who, with or without reasonable accommodation, meets the essential institutional, academic and technical standards requisite to admission, participation and completion of our programs.

A reasonable accommodation is an accommodation that allows a student with a disability to participate in our programs without changing the essential academic requirements of our programs, creating a threat to others or placing an undue burden on the institution.

An example of a reasonable accommodation is giving students with certain learning disabilities additional time to take an exam. Accommodations are provided to allow a student to participate in

our programs but LTI does not provide personal assistants such as aides who help with dressing, feeding and the like.

A disability is a physical or mental impairment that substantially limits one or more major life activities such as seeing, hearing, walking or learning.

All requests for reasonable accommodation must be submitted to the Director of Education. While a student may discuss a possible accommodation with any faculty or staff member, students should be aware that faculty and staff are not authorized to provide accommodations. All inquiries from students about reasonable accommodation should be directed to the Director of Education, who will then evaluate the request and make a decision. The complete policy can be found by visiting: **www.lincolntech.edu/consumerinfo**.

Course and Academic Measurement

The instructional hours listed for each of the programs in this catalog are included in compliance with State and Veteran's training requirements and are predicated on regular attendance, successful completion of each course in the program without repetition or make-up work and excluding holidays that occur during the period of attendance. An instructional hour is defined as a minimum of 50 contact minutes within any scheduled 60-minute period.

A credit hour is defined as an amount of work represented in intended learning outcomes and verified by evidence of student achievement for academic activities as established by the school comprised of the following units: didactic learning environment; supervised laboratory setting of instruction; internship; and/or out-of-class work/preparation.

Grading

Grading is based on the student's class work and lab/shop work, and the results of written and performance tests. An average is taken of all grades in any marking period and must be at a specified CGPA or above to be considered making satisfactory academic progress.

Percentage	Letter Grade	Interpretation	Point Value
95-100	A	Excellent Plus	4.0
90-94	A–	Excellent	3.9
87-89	B+	Good Plus	3.8
84-86	B	Good	3.5
80-83	B–	Good Minus	3.0
77-79	C+	Average Plus	2.8
74-76	C	Average	2.5
70-73	C–	Average Minus	2.0
67-69	D+	Below Average	1.5
64-66	D	Poor	1.2
60-63	D–	Poor	1.0
59 and below	F	Failing Work	0.0
Incomplete	I	Temporary grade; Is not considered in computing Grade Point Average; Requires make-up work.	N/A
Withdrawal	WA	Received by students who officially withdraw from a course before the end of the drop/add period.	N/A
Withdrawal	W	Withdrawal after the drop/add period.	N/A
Pass	P	Received by students in Internship/Externship or Developmental Courses. "P" is not considered in computing the Grade Point Average.	N/A
Non-Pass	NP	Received by students in Internships or Developmental Courses.	N/A
Repeat Course	**	Received by students who repeat a course.	N/A

The State of Connecticut mandates that all Electrical and HVACR students achieve a minimum grade of 75% at the end of each module. The student will be given instruction in related subjects, which assist him/her to qualify for State licensure upon successfully completing each module with a grade of 75% or higher and completing the mandated on the job training OJT requirement. Each student's progress will be evaluated periodically and student-teacher conferences held as indicated to discuss academic progress.

Satisfactory Academic Progress

INTRODUCTION

Federal regulations require the Institution to monitor the academic progress of each student who applies for financial aid and to certify that each student is making satisfactory academic progress toward a degree, diploma, or certificate. In accordance with those regulations, the Institution has established standards of Satisfactory Academic Progress (SAP) that include qualitative, quantitative and incremental measures of progress. Students bear primary responsibility for their own academic progress and for seeking assistance when experiencing academic difficulty. Academic advisement, tutoring, and mentoring programs are all available.

QUALITATIVE MEASURE OF PROGRESS (GRADE POINT AVERAGE)

All students (except those enrolled in Electrical and HVAC/R programs) are required to meet the minimum cumulative grade point average (CGPA) shown on the chart below. Grades ranging from "A" to "F" will be included in the CGPA calculation.

PROGRAM INTERVALS (Based on Total Published Program Credits)	MINIMUM REQUIRED GRADE POINT AVERAGE
BELOW 25%	1.25
25% TO <50%	1.50
50% TO <75%	1.75
75% AND ABOVE	2.00

The following Qualitative Measure of Progress chart is applicable to students enrolled in the Electrical and HVAC/R programs:

PROGRAM INTERVALS (Based on Total Published Program Credits)	MINIMUM REQUIRED GRADE POINT AVERAGE
BELOW 25%	2.50
25% TO <50%	2.50
50% TO <75%	2.50
75% AND ABOVE	2.50

QUANTITATIVE MEASURES OF PROGRESS (PACE OF PROGRESSION AND MAXIMUM TIME FRAME)

PACE OF PROGRESSION ("PACE")

The institution has established a minimum pace of progression for all enrolled students as outlined in the table below. Grades of "F", "I", "W", (or blank/missing) are treated as registered credits but NOT earned credits and thus negatively impact the pace of progression.

QUANTITATIVE MEASURES OF PROGRESS (PACE)	
PROGRAM INTERVALS (Based on Total Published Program Credits)	**MINIMUM PACE OF PROGRESSION**
BELOW 25%	50%
25% TO <50%	66.67%
50% TO <75%	66.67%
75% AND ABOVE	66.67%

The formula used to calculate the Minimum Pace of Progression will vary depending on the program of study as noted below.

MINIMUM PACE OF PROGRESSION	
PROGRAM STANDARD	**FORMULA**
CREDIT HOURS	$\frac{\text{cumulative earned credits}}{\text{cumulative registered credits}}$
CLOCK HOURS	$\frac{\text{cumulative earned hours}}{\text{cumulative scheduled hours}}$

MAXIMUM TIME FRAME

All financial aid recipients are expected to complete their degree/diploma/certificate within an acceptable period of time. The maximum time frame for financial aid recipients is 150% of the published length of the program. For students enrolled in credit hour programs, the MTF is based on 150% of the minimum required credits for graduation as published in the catalog. For students enrolled in clock hour programs the MTF is calculated as 150% of the clock hours required for successful program completion as published in the catalog.

EVALUATION PERIOD

In order to maintain eligibility for Title IV funding, students must maintain satisfactory academic progress.

FAILURE TO MEET STANDARDS

SAP/FA WARNING

- If at the end of the evaluation period a student has not met either the GPA or pace of progression standard, the student will be placed on warning for one evaluation period. Students on warning are eligible to register and receive financial aid.
- If at the end of the warning period a student who has been on warning has met both the cumulative GPA and cumulative pace standards, the warning status is ended and the student is returned to good standing.

SUSPENSION OF STUDENTS ON SAP/FA WARNING STATUS

If at the end of the warning period a student who has been on SAP/FA Warning status has not met both the cumulative grade point average and minimum pace of progression standards, the student shall be placed on SAP/FA Suspension. Students on SAP/FA Suspension are not eligible to receive financial aid.

SUSPENSION OF STUDENTS NOT ON SAP/FA WARNING STATUS

- **Suspension for Exceeding the Maximum Time-Frame.** If at the end of the evaluation period a student has failed to meet the institution's standard for measurement of maximum time-frame, the student shall be suspended from financial aid eligibility and may be subject to dismissal.
- **Suspension for Inability to Meet Program Requirements within the Maximum Time Frame.** If at the end of the evaluation period the institution determines it is not possible for a student to raise her or his CGPA or pace of progression percentage to meet the institution's standards before the student completes his/her program of study, the student shall be suspended from financial aid and may be subject to dismissal.
- **Suspension for Extraordinary Circumstances.** The Institution may immediately suspend students in the event of extraordinary circumstances, including but not limited to previously suspended (and reinstated) students whose academic performance falls below acceptable standards during a subsequent term of enrollment; students who register for courses, receive financial aid, and do not attend any classes; and students whose attendance patterns appear to abuse the receipt of financial aid and may be subject to dismissal.

APPEALS AND PROBATION

APPEALS

A student who fails to make satisfactory academic progress and is suspended has the right to appeal based on special, unusual or extenuating circumstances causing undue hardship such as death in the family, student's injury or illness or other special circumstances as determined by the institution.

- Appeals must be submitted in writing on a form(s).
- The appeal must include an explanation of the special, unusual or extenuating circumstances causing undue hardship that prevented the student from making satisfactory academic progress.
- The appeal must also include what has changed in the student's situation that would allow the student to demonstrate satisfactory academic progress at the end of the next evaluation period.
- Supporting documentation beyond the written explanation is required.
- Initial consideration of appeals will be undertaken by the Appeal Committee which will minimally consist of the Director of Education, and /or the Financial Aid Representative. The Campus Executive may appoint additional members as deemed appropriate.
- Appeals that are approved must contain an academic plan that, if followed, ensures the student would be able to meet satisfactory academic progress standards by a specific point in time.

SAP/FA PROBATIONARY STATUS

A student who has successfully appealed shall be placed on SAP/FA Probation for one evaluation period. If, at the end of the next evaluation period, a student on SAP/FA Probation status:

- Has met both the institution's cumulative grade point average and pace standards, the student shall be returned to good standing.
- Has not met the institution's cumulative grade point average and pace standards but has met the conditions specified in his/her academic plan, the student shall retain his/her financial aid and registration eligibility under a probationary status for a subsequent evaluation period.
- Has not met the institution's cumulative grade point average and pace standards and has also not met the conditions specified in his/her academic plan, the student shall be re-assigned a SAP/FA Suspension status immediately upon completion of the evaluation.

NOTIFICATION OF STATUS AND APPEAL RESULTS

STATUS NOTIFICATION

Students are notified in writing (letter or email) when the evaluation of satisfactory academic progress results in warning, suspension, or probation. The notice includes the conditions of the current status and the conditions necessary to regain eligibility for registration and financial aid. Notice of suspension also includes the right and process necessary to appeal suspension.

APPEAL RESULT NOTIFICATION

Students are notified in writing (letter or email) of the results of all appeals. Approved appeals include the conditions under which the appeal is approved and any conditions necessary to retain eligibility for registration and financial aid. Denied appeals include the reason for denial.

REINSTATEMENT

A student who has been suspended from financial aid eligibility may be reinstated after an appeal has been approved or the minimum cumulative GPA and pace standards have been achieved. Neither paying for their own classes nor sitting out a period of time is sufficient **in and of itself** to re-establish a student's financial aid eligibility.

TREATMENT OF GRADES AND CREDITS

Credits: The unit by which academic work is measured.

Registered (Attempted) Credits: The total number of credits for which a student is officially enrolled in each term.

Cumulative Registered Credits: Cumulative registered credits are the total number of credits registered for all terms of enrollment at the Institution, including summer terms and terms for which the student did not receive financial aid.

Earned Credits: Earned credits ranging from "A" to "D-" and "P". They are successfully completed credits that count towards the required percentage of completion (66.67%) as defined by the quantitative measure.

Attempted, NOT earned: Grades of "F", "I", "NP", "W" (or a blank/missing) will be treated as credits attempted but NOT successfully completed (earned).

Audited Courses: Audited courses are not aid eligible courses and are not included in any financial aid satisfactory academic progress measurements.

Repeat Credits: Repeat credits are credits awarded when a student repeats a course in order to improve a grade. A student may repeat a class as allowed by the institution. The institution will use the highest grade achieved to calculate GPA. All repeated credits are included in the percent of completion and maximum time frame calculations.

Transfer Credits: Transfer credits are credits earned at another postsecondary educational institution which are accepted by this Institution. Transfer credits which are accepted by the Institution and are applicable to the student's program of study shall be counted as credits attempted and completed for calculation of pace of progression and maximum time frame. Grades associated with these credits are not included in calculating CGPA.

For students who either change programs within the institution or wish to earn an additional credential, all credits earned toward courses that apply to a student's new program of study or credential will be used to determine satisfactory academic progress.

Withdraw: The mark of "W" (withdrawal) is assigned when a student withdraws from a class after the add / drop period or has not satisfied the requirements of an "I" grade within a defined timeframe. It is not included when calculating grade point average or earned credits. Thus, it does not impact CGPA but does negatively impact earned credits and, therefore, negatively impacts the student's percent of completion.

The mark of "WA" is assigned when a student withdraws from a class before the end of the Add/Drop period. It is not included when calculating grade point average or earned credits. Thus, it does not impact CGPA and does not negatively impact earned credits.

Incompletes: The mark of "I" (incomplete) is a temporary grade which is assigned only in exceptional circumstances. It will be given only to students who cannot complete the work of a course on schedule because of illness or other circumstances beyond their control. An "I" grade will automatically become a "W" grade if requirements to complete course work have not been satisfactorily met within 14 days of the original course end date. Instructors have the option of setting an earlier completion date for the student. A grade of "I" is not included when calculating grade point average or earned credits. Thus, it does not impact CGPA but does negatively impact earned credits and, therefore, negatively impacts the student's percent of completion.

Add/Drop Period: The add/drop period is the span of time when students may be added or removed from a course. A student may be added or removed from a course on or before the third scheduled class session. Only in-person sessions are calculated in the three day add/drop period count with the exception of fully online offerings. A student being added to a course will be recorded as absent for any sessions missed and allowed make-up work. A grade of "WA" will be applied when a student has recorded attendance and is withdrawn during the add/drop period.

Satisfactory Academic Progress for VA Beneficiaries

In accordance with the requirements set forth by the Department of Veterans Affairs, the school will notify the VA within 30 days of any VA beneficiaries who are placed on SAP/FA Warning for a 2nd consecutive term. This notification will include the date at which the student will be placed on SAP/FA Suspension. Students in SAP/FA Suspension are considered ineligible for VA Educational Assistance benefits and as such the School VA Certifying Official will no longer be permitted to certify the student's enrollment for any training towards the remaining requirement of his/her program which he/she completes before being readmitted to the approved program. VA students may avail themselves of the school's appeals process.

Transcripts (Progress Records)

Following a review by the School, grade reports (unofficial transcripts and/or degree audits) are issued to the student upon completion of each course or term on the student portal. Individual grade records are permanently maintained for each Student and

are open for inspection in accordance with the Family Educational Rights and Privacy Act of 1974.

The student will receive an official transcript upon graduation. Requests for official transcripts while in school or additional copies of official transcripts after graduation can be ordered at https://www.lincolntech.edu/academics/transcripts. Current students may obtain unofficial transcripts on their student portal account https://myportal.lincolnedu.com/. Requests for replacement diplomas / degrees must be submitted in writing to the school.

Transfer Credits

The school's programs are career oriented in nature with objectives designed to prepare graduates for immediate employment in their chosen field of study upon graduation. Students seeking to continue their education at other postsecondary institutions should be aware that the school does not claim or guarantee that credit earned here will transfer to another institution and acceptance of the credit earned here is determined at the sole discretion of the institution in which the student desires to transfer his/her credits. Students are advised to obtain information from all institutions they are considering attending in order to understand each institution's credit acceptance policies. It is the student's responsibility to confirm whether or not credits earned at this campus will be accepted by another school.

Students who transfer credits from a postsecondary institution accredited by an agency recognized by the U.S. Department of Education will receive a grade of "TR" on their transcripts. Those courses which have been accepted as transfer credit are not included in the cumulative grade point average (CGPA) calculation but are calculated towards the maximum time frame to be used to determine a student's satisfactory academic progress. Courses that are the same (Course Code, Course Name, Credits and Description) that are transferred from one Lincoln campus to another, will be calculated within the student's CGPA to the new campus. This is determined by the campus administrator within the campus system. Applicants requesting transfer credits must apply prior to starting school.

For Veterans Affairs Students: VA regulation (Title 38, Code of Federal Regulations, Section 21.4253 (d)(3) and 21.4254(c)(4)) requires that Lincoln Tech receive and evaluate all post-secondary prior credits for all students receiving educational benefits from the Veterans Affairs education programs (CH30, CH33, CH35,CH1606, CH31, and VR&E) which includes prior military service through the evaluation of your military transcripts.

Transfer applicants must submit a transcript from their former institution that clearly indicates the courses taken, grades achieved and credits awarded. All credits transferred from applicable courses must have an earned grade of "C" or better. Or, the applicant must produce an up-to-date professionally recognized certification along with a verifiable history of employment relating to the course.

Regardless of the number of transfer credits awarded, all students must complete a minimum of 50% of the credits required for graduation through actual attendance for all programs taken.

Those students who transfer credits from an accredited postsecondary institution will receive a grade of "TR" as noted in the grading policy. For students who change programs, only those courses that count towards a student's new program of study will be used to determine satisfactory academic progress.

The Education Department manager receives and evaluates the student transcript and any related support materials (such as a school catalog and / or course syllabi) to determine where prior learning is a match to school course offerings. There are a variety of considerations when evaluating submitted records (i.e. institution, course title, course level, course descriptions, grades, and year of study). Where needed, a campus subject matter expert will participate in the evaluation process. The goal is to ensure student academic success; therefore, an approved transfer of credit is a result of verified evidence of student learning which aligns with school offerings. When further assessment of student learning may be needed, the school may consider the option of test out.

Student applicants with evidence of prior work experience directly applicable to the program may choose to submit their documentation for review. Such applicants will have their skills and knowledge validated through a test out procedure.

TEST OUT

Test Out exams provide students the opportunity to be exempt from certain required courses by demonstrating proficiency through assessment in the subject area to verify knowledge and skill. Applicants requesting to take a test out exam must do so prior to starting school. Not all courses are eligible for test out exam credit, and students cannot have attended past the add/drop period in the course for which they want to test out. To receive credit for a course, the applicant must earn a B on the test out exam on the first attempt. A successful Test Out result is recorded as "TO" on the student transcript and is not considered in computing the Grade Point Average. A nominal administrative fee may apply for Testing Out. Applicants interested in Test Out should see the Education Department Manager.

When a student transfers from one Lincoln program to another Lincoln program, an evaluation is performed of all courses passed and skills / knowledge obtained which may be applicable to the new enrollment. Where course equivalencies are established, the earned grade in the original enrollment is applied to the new enrollment. A grade of "TO" for test out is applied to a course in the new Lincoln enrollment when it is evident that the required skills and knowledge sets had been obtained across multiple passed courses in the original enrollment.

Internship Requirements

In order to participate in the non-didactic part of the program:

- Students must achieve a minimum cumulative grade point average of 3.5 cumulative GPA and an overall attendance record of 95% in order to participate in internship.
- Have an approved resumé.
- Should an employer require it, students must submit to a background check and/or a drug screening and/or show proper documentation of required immunization records prior to the start of their last course, module, or class. An unfavorable result may preclude a student from participating in the internship portion of the program, resulting in the student being withdrawn from school.

Withdrawals and Incomplete Grades

A "W"ithdrawal is issued to students who are withdrawn from the institution or course after the introductory period of enrollment and prior to the end of the module or term. Readmitted students must retake all "W"ithdrawal graded courses. A "W" will not be calculated in the cumulative GPA, but counts as an attempt for satisfactory academic progress.

The mark of "WA" is assigned when a student withdraws from a class before the end of the Add/Drop period. It is not included when calculating grade point average or earned credits. Thus, it does not impact CGPA and does not negatively impact earned credits and, therefore it does not impacts the student's percent of completion.

An "I"ncomplete is given to students who do not complete a test or required course work. The student has a maximum of 14 days to complete the course work. The school may require less time in certain circumstances. If the coursework is not completed

in the specified time, the student will receive a zero for the assignment which will be averaged into the GPA.

Should this effect the students expected graduation date, students are notified via the web-based student portal (Lincoln's Student Portal).

Course Repeats

Based on scheduling availability, a student will be allowed to repeat one failed course; or a course that falls below a programmatic standard, at no additional tuition charge provided the student graduates and provided the repeat will not prevent the student from completing the program in the maximum time permitted by the School's Satisfactory Academic Progress policy. If the student fails or falls below a programmatic standard in more than one course within the term, the free course repeat will apply to the course with the higher number of hours. Students who fail (or fall below a programmatic standard) the same course twice will be terminated except in the case of verifiable extenuating circumstances. In such cases, a student may be granted permission by the Education Department to enroll in the course for a third time if the circumstances are thoroughly documented.

Official and Unofficial Withdrawals

An official withdrawal is initiated by the student. Any student considering to officially withdraw from a program should speak to his/her Education Department Manager as soon as possible. If the student ultimately decides to officially withdraw, it is requested that the student submits their intent to withdraw with their reasons in writing to the Education office.

Prior to the official withdrawal, the student should participate in exit interviews with the Education and Financial Aid Department Managers to review options for returning to school and financial responsibility.

An unofficial withdrawal is initiated by the campus staff. Any student who fails to notify the school of their intent to withdraw and violates the attendance policy or fails to return from a scheduled leave will be withdrawn. Unofficial withdrawals may be initiated by the school due to violations of the student conduct policy, as published in the catalog, that reasonably warrant expulsion (e.g. fighting, having a weapon on site, activities of academic dishonesty). Notification of an unofficial withdrawal will be sent to the student.

Grade Appeal Policy

Any student wishing to have a course grade reviewed must appeal in writing within 10 days after the final grade has been assigned. Grade Appeal Forms are available from the Education Office. Initially the appeal should be given to the faculty member who awarded the grade. If satisfaction is not obtained, the student should then appeal to the Education Supervisor who after reviewing with an Academic Review Panel, will respond in writing with a binding decision.

Leave of Absence

The granting of a Leave of Absence (LOA), which may be issued to students for reasons such as, but not limited to, personal, professional, medical or financial hardship, must be approved in accordance with guidance in accreditation, state and federal regulations. In compliance with these regulations a student may be granted a number of Leaves during any twelve month period provided that the cumulative number of days of LOA's do not exceed 180 calendar days. The length of any one LOA is at the discretion of campus management. The student must state the specific reason for the LOA on the Leave of Absence Request Form, and have an exit interview with the Education Department to determine what is in the best interest of the student.

If the leave of absence from school exceeds the officially approved date of return the student will be withdrawn from school and any refunds, if applicable, will be issued within 30 days after the effective date of withdrawal. Any unearned financial aid credited to the student's account will be refunded. Reinstatement of financial aid will require a new application and routine processing time. In addition, the student will be required to complete a new enrollment agreement (contract) at the tuition rate in effect on the date of re-application.

Re-entrance

Students requesting readmission following an interruption in classes, and students who fail to re-enter on the scheduled time following an authorized leave of absence must re-enroll under the current effective school Enrollment Agreement reflecting revised prices, if applicable. The school reserves the right to limit re-entries. Note: The student's SAP status will be re-calculated and the appropriate status applied to the student's enrollment record.

Students are allowed no more than two interrupts. To re-enter a second time, a student may be readmitted where documented extenuating circumstances exist. An appeal letter must be presented to the Education Department for review. If the Education Department determines that re-admittance is justifiable, the student may be readmitted only after meeting with the Education Department. This signed document must remain in the student's file. A student may not be readmitted a third time unless documented extenuating circumstances exist as determined by the Education Department.

Students, who are terminated by the school for disciplinary reasons or academic deficiencies, may request re-entrance. Such a request must be by letter to the school's Campus President. The letter must set forth valid reasons for granting the request. The request will be reviewed by the Re-entry Committee, and the student will be notified of the Committee's decision.

Independent Study

In certain circumstances a student is unable to take a course at its scheduled time or a student might need a course to graduate that is not scheduled in the time remaining in his or her program. When this situation occurs, the school may authorize the student to take the course through independent study. In order to take a course through independent study, an approved plan must be signed by the applicable staff members at the school.

If the school grants the student permission to take the course through independent study, the student must agree in writing to the study plan including the syllabus that outlines the learning objectives, texts, course requirements, evaluation criteria, meeting dates, and examination dates for the course.

A student must meet the following conditions to take a course through independent study:

1. Successfully completed at least 50% of the credit hours required in the program;
2. Have an overall cumulative grade point average (CGPA) of at least 2.0;
3. Making satisfactory academic progress (SAP).

No more than 10% of a program offering is permitted to be delivered via independent study. Further, there may be some courses that do not lend themselves to independent studies. The school reserves the right to deny any student the ability to take a course through independent study.

Academic Information

Graduation Requirements

To be eligible for graduation the following requirements must be met:

- Successfully complete all required courses in the program
- Achieve an overall Grade Point Average of 2.0 excluding Electrical and HVAC/R programs which require a GPA of 2.5 due to programmatic standards.
- Meet satisfactory academic progress requirements

Campus Information

Campus Information

Corporate Administration

Scott M. Shaw
President & CEO

Marie G. Acker
Group Vice President

Our Faculty

Our instructors are proven professionals, each selected because of his/her knowledge of the subject matter gained through years of experience in the field. Passing the benefit of years of experience on to you is each instructor's prime concern. Equally important, our instructors are pros in the classroom, shop, or lab, and have proven their teaching capability by successfully completing a comprehensive Instructor Training Program. In addition, participation in our In-Service Instructor Training Program is required, insuring the continuation of our quality teaching standards. Please refer to our school administration and instructors catalog addendum for a list of our dedicated staff.

With ***confidence***
and the right skills,
there's ***no question***
you're going to be somebody.