Lincoln College of Technology's initial application to operate as an out-of-state institution in Maryland in accordance with COMAR 13B.02.01

LINCOLN TECH

February 26, 2021

VIA OVERNIGHT MAIL

Dr. James D. Fielder
Secretary
MHEC
6 N. Liberty Street, 10th Floor
Baltimore, MD 21201

RE: Lincoln College of Technology, Columbia, MD
Application for Initial Approval for Out-of-State Degree-Granting to Operate in Maryland

Dear Dr. Fielder:

Please accept this correspondence and accompanying application for Initial Approval for Out-of-State Degree-Granting Institutions to Operate in Maryland.

As you know, Lincoln College of Technology ("LCT") has been classified as an in-state institution, but recently a decision was made to merge our college with another institution within our system owned and operated by Lincoln Educational Services Corporation ("LESC"). Indeed, this may be the first time you have received an initial out-of-state application for an institution that has operated in Maryland since 1960. As you witnessed when visiting our campus, our institution has always instilled an educational philosophy of a real-world experience for our students. Thus our curriculum always incorporate a tremendous amount of hands-on requirements and are inclusive of the advice provided by our program advisory boards. Further, our students are required to wear uniforms and the hours of instruction are completed in shifts that would mirror their future employment in the field.

Since opening our doors in 1960 in Landover, and subsequently moving to our current location in 1997, we have provided thousands of businesses in Maryland with highly skilled and trained employees in the automotive, HVAC, electrical and culinary and baking fields. We currently enroll 580 students and employ 84 faculty and staff. Our graduate placement rates have been consistently 80 percent or greater and over 90 percent of our student body comes from the State of Maryland and continue to reside in Maryland even after graduation. As you review our application, I would point to the support from the employers where our graduates find gainful employment. Specifically, please review the e-mail correspondence in support of our application from Scott Emge from Penske Rental, Leasing and Logistics based in Jessup. Mr. Emge states that Penske has hired 18 LCT graduates; two more are pending final hiring; and 7 out of the 18 have already received a promotion. Mr. Emge then concludes his e-mail asking what can be done to continue this type of partnership. While this communication makes our institution extremely happy, it is not uncommon, as our employers understand that LCT serves as an important part of providing well-trained graduates to essential employers.

In your letter dated December 22, 2020, you noted our reason and rationale for the merger with the Lincoln Technical Institute campus in New Britain, Connecticut. As an institution with a long history in the state, as well as always being transparent with MHEC, I need to reiterate there was nothing nefarious in this decision and it was solely done as a means to reduce the administrative burden on my staff as an independent main campus. Further, the U.S. Department of Education and our institutional accreditor, the Accrediting Commission of Career Schools and Colleges, have approved several of these mergers for other colleges within the LESC system without hesitation.

Also, while Lincoln Technical Institute, New Britain, Connecticut, may technically be the main campus for a group of six different institutions owned and operated by LESC, its solely in name only. If MHEC had requested an organizational chart to be completed before and after the merger, there would have been no changes in the reporting structure. All of our senior managers have complete authority over their departments and report directly to me. Further, as prior to the merger, I report to the Executive Vice President of LESC and do not any have operational reporting to the main campus. Lastly, I would be remiss if I did not point out that our structure, with ownership by a parent corporation that also provides a multitude of necessary services to our college such as legal, accounting, finance, marketing, and human resources, is not uncommon for multi-state operations similar to LESC.

In summary, we respectfully request that you approve our institution's application. Our staff worked diligently for the last two months on this application, with tremendous guidance from your staff, and I believe you will find our application to be both thorough and conclusive that we have met the regulations that govern out of state institutions. Further, we hope that you will take into consideration that our institution has co-existed for 60 years in Maryland, first as an private career school and the subsequently as an in-state degree-granting institution, and we are not entering the state as a new institution with programs offered at other institutions. Lastly, whether our institution is classified as in-state or out-of-state our mission will remain the same which is to provide superior education to students for in-demand careers while transforming students' lives.

If you need any additional information, please feel free to contact me at chughes@lincolntech.edu.

Sincerely,

Cory Hughes
Campus President

MARYLAND HIGHER EDUCATION COMMISSION

Application for Initial Approval for Out-of-State Degree-Granting Institutions to Operate in Maryland

Please Note: A separate application form must be completed and submitted with all supporting documentation for each proposed location in Maryland.

PROPOSED LOCATION IN MARYLAND.

Please provide the full mailing address. If a specific facility is yet to be identified, please provide as a minimum, the county or city in which you plan to operate. 9325 Snowden River Parkway, Columbia, MD 21046

[If these programs/classes are to be offered at a military installation and the recruitment and enrollment of students is limited to active duty personnel, their dependents, or civilians employed at the installation, and if the institution waives its right to claim veterans' benefits for enrolled students, do not complete this application. Complete an Application for Exemption to COMAR 13B.02.01 instead.]

PROPOSED START DATE. Lincoln College of Technology (previously known as Lincoln Technical Institute) was originally established and has been in continuous existance in Maryland since September of 1960. Due to a recent reorganization in OPEID numbers, the Columbia, MD campus has gone from being a single stand alone Main Campus to an Additional Location of Lincoln Technical Institute, New Britain, CT. This change necessitated the filing of the following Out of State application.

Applications should be submitted at least 5 months prior to the proposed start date.

INSITUTION APPLYING FOR APPROVAL.

Name of Institution: **Lincoln College of Technology**

Web Address: **www.lincolntech.edu**

OPEID Code: **ED00730309**
U.S. Department of Education, Office of Postsecondary Education, ID Code -- Title IV eligibility.

Chief Executives Officer: **Cory Hughes**

Mailing Address: **9325 Snowden River Parkway, Columbia, MD 21046**

Telephone: 410-290-7100 **Email:** **chughes@lincolntech.edu**

Institutional Liaison: Name and title of the individual who will serve as liaison to the Maryland Higher Education Commission:

Name: **Cory Hughes**

Title: **Campus President**

Mailing Address:	9325 Snowden River Parkway, Columbia, MD 21046
Telephone: 410-290-7100	Email: chughes@lincolntech.edu

********** CERTIFICATION **********

I hereby affirm that the answers given in this application and its attachments are accurate and complete and further agree to comply with the *Annotated Code of Maryland* and State regulations governing the operation of out-of-State degree-granting institutions (COMAR 13B.02.01).

2/25/2021
Date

Signature of Chief Executive Officer

Please Submit All Information To:

Maryland Higher Education Commission
Division of Planning and Academic Affairs
6 N. Liberty St., 10th Floor
Baltimore, Maryland 21201
acadprop@mhec.state.md.us
(410) 767-3268

A copy of these regulations can be found at the Maryland Higher Education Commission's web site www.mhec.state.md.us (under Academic Approval Process) along with an on-line application form.

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I. SUPPORTING DOCUMENTATION.

Only a complete application can be acted upon. While separate application forms must be completed and submitted for each proposed location, the following Supporting Documentation needs to be included only once for the entire package of applications. **CHECK EACH ITEM AS ATTACHED.**

☒ Catalogs and Other Institutional Publications. COMAR 13B.02.01.20A(1)

Include one printed copy of the institution's home campus catalog or other publication (graduate and undergraduate as applicable) that contains information on: academic progress standards, curricular content of the proposed programs, student services information, credit for prior learning as well as credit for practica, clinical experience, internships, and cooperative work experiences. Please also provide copies of the awards to be granted.

☒ Application Fee. COMAR 13B.02.01.07D(2)

The institution shall submit a non-refundable application fee in the amount of (a) $7,500 for up to two degree programs and (b) an additional $850 for each degree program over two programs. The institution's check should be made payable to: Maryland Higher Education Commission.

☒ Accreditation. COMAR 13B.02.01.07D(3)(g)

Provide a copy of the most recent letter of approval (notification) from an organization recognized as an accrediting agency by the U.S. Department of Education. Along with your most recent notification of institutional accreditation, please provide evidence that you are in compliance with that organization's policies and procedures related to off-campus educational activities. If any of your proposed programs require program accreditation provide evidence of that accreditation.

☒ Registration as an Out-of-State Corporation. COMAR 13B.02.01.07D(3)(f)

To transact interstate business in Maryland, the institution must qualify with the State Department of Assessments and Taxation by making the certification required in the Corporations and Associations Article, §7-202, Annotated Code of Maryland. A public institution is not required to qualify as a foreign corporation. However, a business entity affiliated with a public institution or a private institution (profit or non-profit) must qualify as a foreign corporation. The Foreign Corporation Qualification Form may be obtained from the Maryland Department of Assessments and Taxation, Room 809, 301 West Preston Street, Baltimore, Maryland 21201 or on-line at: www.dat.state.md.us. Once qualified, the institution must provide a copy of the certificate of good standing issued by the State Department of Assessments and Taxation.

☒ Certificate of Compliance COMAR 13B.02.01.07D(3)(o)

Please provide a certificate for each location for which you are seeking approval, indicating that the proposed facility has been inspected and is found in compliance with local and State ordinances pertaining to fire and safety. If this is not presently available, it may be submitted no later than 30 days prior to the start of classes.

☒ Board of Trustees Resolution of Financial Solvency COMAR 13B.02.01.07D(3)(e)

Please provide a resolution from your Board of Trustees addressed to the Secretary of Higher Education stating that your institution is financially solvent.

☒ Advertisements COMAR 13B.02.01.07D(3)(p)

Please provide copies of any advertisements in print format related to the proposed programs.

☒ Teach-out Plan COMAR 13B.02.01.07D(3)(j)(iv)

The institution must provide a copy of its teach-out plan allowing enrolled students to complete their programs if the institution decides to cease operation in Maryland.

II. APPLICATION QUESTIONAIRE

This questionnaire, properly completed with supporting documentation, shall serve as an application for approval to operate in Maryland under the *Code of Maryland Regulations* (COMAR) 13B.02.01. It must be completed for each proposed location.

1. Programs.

Please enter below, or create an attachment (labeled "A-1: Programs") to this application with your responses to the following:

(a) Provide a list of the proposed programs (or individual courses) to be offered at this location. An institution may apply to offer courses only if the full complement of courses comprise not more than 3 courses (or 9 credit hours) of a degree program. [See COMAR 13B.02.01.07D(5)] For each

program/course provide the following information: (1) the full title of the program (or individual course); (2) the degree or certificate to be awarded; (3) the mode of instructional delivery; (4) the number of credit hours (semester or quarter); and (5) whether they are offered at the parent campus.

Program Title	Degree	Mode of Instruction	Total Credit Hours	Offered on Main Campus Yes / No
Example: Organizational Management	*M.S.*	*Classroom*	*36 sem*	*Yes*
Example: BUS 101 Intro to Business Administration		*Distance Ed.*	*3 sem*	*Yes*
Automotive Service Management	A.A.S.	Blended	70	See A-1_ Programs (a)
Automotive Technology	Certificate	Blended	49	See A-1_ Programs (a)
Automotive Technology with AUDI Education Partnership	Certificate	Blended	59	See A-1_ Programs (a)
Electrical and Electronic Systems Technology Service Management	A.A.S.	Blended	63	See A-1_ Programs (a)
Electrical and Electronic Systems Technology	Certificate	Blended	42	See A-1_ Programs (a)
Air Conditioning, Refrigeration & Heating Technology	Certificate	Blended	45	See A-1_ Programs (a)
Welding and Metal Fabrication Technology	Certificate	Blended	27.5	See A-1_ Programs (a)
Culinary Arts and Food Services	Certificate	Blended	39	See A-1_ Programs (a)
International Baking & Pastry	Certificate	Blended	37.5	See A-1_ Programs (a)

(b) If the information does not appear in the catalog or publication you submitted, provide (1) a description of the curriculum; (2) the objectives of each course; and (3) a course schedule for the proposed location.

See Catalog Publication for program descriptions, objectives and course schedule labeled A-1:Programs (b)

(c) Please provide a brief description of the student population to be served by the proposed program.

At present, there are approximately 580 active students enrolled in day and evening classes at Lincoln College of Technology in Columbia, MD.

Air Conditioning, Refrigeration, & Heating Technology 151
Automotive Service Management 21
Automotive Technology 133
Automotive Technology with AUDI Education Partnership 61
Culinary Arts and Food Services 57
Electrical and Electronic Systems Technology 72
Electrical and Electronic Systems Technology Service Management 21
International Baking & Pastry 10
Welding and Metal Fabrication Technology 60

See A-1: Programs (c)

2. Educational Need. Before the Commission may evaluate the readiness of an out-of-State institution to operate or award new degrees in the State, including the offerings of an instructional program or a degree level not previously approved, the institution shall present evidence demonstrating the educational need to establish operations, offer programs, and award the degrees in question in the State. In addition, the out-of-State institution shall demonstrate that the proposed program, for which the institution is making application, meets a critical and compelling regional or Statewide need and is consistent with the Maryland State Plan for Postsecondary Education. COMAR 13B.02.01.06A & C

INSTRUCTIONS. Please enter the requested information in the spaces provided below, or create an attachment (labeled "A-2: Educational Need") to this application with your responses to the following questions for each program.

(a) What critical and compelling Regional or Statewide (Maryland) need and demand do your proposed programs meet? In responding to this question provide documentation as indicated below:

(1) If the proposed programs serve occupational needs, present data on market demand and the availability of openings in the job market to be served by the new programs for which the institution is making application. This information may include workforce and employment projections prepared by the federal and State governments, the availability of graduates in the State or region, marketing studies done by the institution or others, and material from professional and trade associations. COMAR 13B.02.01.06E

See A-2: Educational Need(a)(1)

(2) If the proposed programs serve societal needs (including the traditional liberal arts education), provide a description of how the proposed programs will enhance higher education in Maryland and contribute to society in general.

N/A

(b) If similar programs already exist in the State of Maryland, what are the similarities or differences in your program in terms of the degrees to be awarded, the areas of specialization, and the specific academic content of the programs?

See A-2: Educational Need (b)

(c) Is a Maryland employer sponsoring/supporting the application for the program(s) to be offered at this location? ☐ Yes ☒ No COMAR 02.01.07D(3)(q)

If yes, please attach a letter of support from the employer addressed to the Assistant Secretary, Planning and Academic Affairs. The letter should outline the employer's reasons for selecting the institution and its programs and state the benefits to the employees who participate in the program

(d) Will the programs/classes at this location be closed? [That is, only available to employees or members of the host site and not open to the general public]. ☐ Yes ☒ No

If yes, please supply a copy of a memorandum of understanding from the Maryland entity sponsoring your institution. The memorandum shall specify the institution is operating a closed-site and that the courses are offered solely for its own employees. COMAR 13B.02.01.07D(6)

(e) Will these programs/classes be offered in affiliation with a Maryland Regional Higher Education Center?

☐ Yes ☒ No

If yes, please identify the Maryland Regional Higher Education Center and provide a copy of the Memorandum of Understanding or agreement. COMAR 13B.02.01.22

3. Administrative Staff. The out-of-State institution shall provide for an on-site administrative staff responsible for overall administrative operation of educational activities including counseling, advising, testing orientation, financial aid services, and maintenance of academic records. In addition to being responsible for the administration of the policies and procedures of the parent institution, the designated administrators are responsible for meeting the expectations set forth in this chapter [of the Regulatory Standards of the State of Maryland for Out-of-State Institutions]. The duties and size of the staff shall be adequate for the size of educational activities offered. COMAR 13B.02.01.15

INSTRUCTIONS: Please enter the requested information in the spaces provided below, or create an attachment (labeled "A-3: Administrative Staff") to this application with your responses to the following questions.

(a) How are you are planning to meet the above standard on Administrative Staff?

The Administrative Staff consists of the following:
Campus President,
Academic Dean,
Education Supervisors,
Education Facilitator,
Registrar,
Director of Administrative Services,
Director of Financial Aid,
Director of Career Services,
Director of Admissions,
Network Administrator.

SEE A-3: Administrative Staff (a) for Job Descriptions

(b) Who will be assigned to carry-out each of these duties? Please include a curriculum vitae/resume for each administrator in the attachment to this application

Lincoln College of Technology (previously known at Lincoln Technical Institute) was originally

established and has been in continuous existance in Maryland since September of 1960. Due to a recent reorganization in OPEID numbers, the Columbia campus has gone from being a single standalone Main Campus to an Additional Location of Lincoln Technical Institute, New Britain, CT. This change necessitated the filing of this Out of State application with MHEC. Nothing has changed at the campus level.

At present, there are approximately 580 students enrolled in day and evening classes at Lincoln College of Technology in Columbia, MD.

Oversight of the academic process is facilitated by an Academic Dean, two Education Supervisors, Lead Instructors for each program taught, an Education Facilitator, and a Registrar. The Campus President supports the academic process in the absence of the Dean or when a second opinion is warranted.

Campus President - provides vision and direction for the institution while encouraging department managers to develop innovative methods to exceed campus and system goals. Other duties include:
o Preparing and managing annual fiscal and enrollment budgets.
o Managing monthly P/L including the reforecast of fiscal and enrollment budgets.
o Leading regularly held Executive Committee meetings to monitor trending results versus budget.
o Submitting accurately prepared regulatory reports in a timely fashion.
o Coordinating accreditation efforts including generating relevant data and authoring the response
o Supporting community events through the Chamber of Commerce and related organizations to develop mutually beneficial relationships with local merchants, philanthropic and faith-based organizations.
o Managing the schools' recruitment efforts to maximize enrollment.

Academic Dean – The Dean is responsible for the daily operations of the Education Department for the day and evening school. The Dean manages both the non-instructional staffers (two Education Supervisors, an Education Facilitator and a Registrar) and the instructional faculty (30+ FT Instructors, 8 PT Instructors and 5 Gen Ed faculty members). As the lead academic person on campus, the Dean supervises the Academic Advisement process and sees students (attendance, academics, at-risk, advising, disciplinary) as needed.

Skilled Trades Education Supervisor – The Skilled Trades Education Supervisor manages the skilled trades faculty (Automotive, HVAC, Electrical and Electronics, Welding), monitors the attendance and academic performance of the students enrolled in those programs, and is one of several people involved in the academic advising process. This person also oversee instructor onboarding and faculty file maintenance.

Culinary/International Baking and Pastry Education Supervisor – The Culinary Lead is responsible for the daily operations of the College's Culinary Arts and Food Services (certificate) and International Baking and Pastry (certificate) programs. This Chef is responsible for instructor onboarding, kitchen safety and maintenance, ordering food stuffs, and quality control. Responsibilities also include course and classroom scheduling, scheduling tool and equipment maintenance and procurement, ordering consumables, leading programmatic accreditation efforts and managing the hazardous waste generated by his program. This Chef advises Culinary/IBP students in his role and manages 5 FT Chef Instructors.

Automotive Lead Instructor – The Auto Lead Instructor is responsible for the daily operations of the College's Automotive Technology program (certificate), Automotive Technology with Audi Education Partnership program (certificate), and Automotive Service Management program (degree). This includes course and classroom scheduling, scheduling tool and equipment maintenance and procurement, ordering consumables, leading programmatic accreditation efforts and managing the hazardous waste generated by his program. This Lead instructor manages 12 full time and 4 part time instructors.

Electrical and Electronics Lead Instructor – The EEST Lead Instructor is the campus' liaison to NCCER. He is an NCCER Master Trainer and an NCCER Certified Craft Instructor. This Lead instructor is responsible for the daily operations of the College's Electrical and Electronic Systems Technology program (certificate) and Electrical and Electronic Systems Technology Service Management program (degree). This includes course and classroom scheduling, scheduling tool and equipment maintenance and procurement, ordering consumables, leading programmatic accreditation efforts. He currently manages a

team of 6 full time instructors.

HVAC/R Lead Instructor. - The HVAC/R Lead Instructor is responsible for the daily operations of the College's Air Conditioning, Refrigeration & Heating Technology program (certificate). This includes course and classroom scheduling, scheduling tool and equipment maintenance and procurement, ordering consumables, leading programmatic accreditation efforts and managing the hazardous waste generated by his program. They manages 6 full time and 5 part time instructor.

Lead Instructor Welding - The Welding Lead Instructor manages the operation of a small Welding and Metal Fabrication Technology program (certificate). This includes course and classroom scheduling, scheduling tool and equipment maintenance, ordering consumables, leading programmatic accreditation efforts and managing the waste generated by his program. The program has two (2) full-time instructors. We are in the process of hiring a third instructor.

Education Facilitator – We are currently interviewing to fill this position due to promotion. The person selected for this role will be responsible for monitoring student attendance, academic and disciplinary issues. This person will also speak with students about personal and professional issues that in turn affect the students' ability to successfully navigate their adult responsibilities including schooling. This is a Student Services position.

Questions about Satisfactory Academic Progress (SAP) and the drawing down of Title IV funds, are addressed by members of the financial aid team led by the Director of Financial Aid and/or the Business Office team led by the Director of Administrative Services. Additional guidance is provided by members of the corporate senior leadership team, as required.

IT Support/Network Administrator - is responsible for providing Level 1 and Level 2 Helpdesk support to campus end users and handles campus network issues and site connectivity issues. Lincoln Education Services maintains a corporate HelpDesk that provides services to staff, faculty and students when issues are encountered after hours or are beyond the campus footprint (i.e. corporate backbone).

Registrar - is responsible for student scheduling, attendance, grade reports, student and graduate transcripts, and student files.

Director of Career Services - manages a team of two Career Services Representatives. The CS team is responsible for providing guidance and input starting with the New Student Orientation and ending well beyond the date of graduation for every student who enrolls at Lincoln College of Technology. At Orientation, students are told about the services that are offered by the CS team. During the first week of class, members of the CS team will visit the classroom to reinforce the Orientation message and introduce students to the Career Edge website (https://careeredgelincoln.com/). Run by a 3rd party content provider, Lincoln contracts with Career Edge to provide our students with information related to

•Getting To Know Yourself
•Managing Change & Your Attitude
•Goal Setting
•Learning to Learn & Stress Relief Strategies
•Time Management
•Study Skills
•Becoming an Effective Online Student
•Financial Literacy
•Working in Teams
•Cultural Diversity & Conflict Resolution
•Effective Communication & Networking
•Professional Branding Resume & Cover Letter
•Best Job Search Strategies
•Preparing for the Interview
•The Interview Process
•Answering Difficult Questions

•On the Job Success
•Planning Your Future.

The CS team will work with new students looking for part-time work (out of field) and eventually in-field part and full time work. The goal is for students to start with part time infield work that transitions into a full time position upon graduation. The CS department also plans several full and part time job fairs annually and monthly "lunch and learns" highlighting specific employer partners.

Director of Admissions - leads a team of eight (8) Admissions Representatives and a Presenter. The admissions team is responsible for contacting interested people and setting an appointment for them to come view the school. During the Admissions process, prospective students tour the building and sit with an Admissions Representative to learn about our program offerings. Lasting between 90 and 120 minutes, prospective student interviews typically involve a discussion of the students' motivations and challenges, support system, work schedule, post graduation plans, and long term goals. Every student must be recommended by the Admissions Representative to the Director of Admissions/Campus President.

Counseling: Every member of the Lincoln community has received student support training. This training not only involves directing students to the right person to resolve campus issues but rather speaks to evaluating the health and well being of the student, as well. Lincoln College of Technology has contracted with a third party organization named StudentLinc to provide counseling and referral services. SupportLinc is a no-cost resource that helps students and benefit eligible family members deal with life's challenges and the demands that come with balancing home and work. The program provides confidential services for a wide array of personal and work-related concerns, including Anxiety, Anger Management, Depression, Family Counseling, Grief, Job Stress, Marital Concerns, Stress Management, Substance Abuse, and Work-Life Balance.

To speak with a licensed SupportLinc counselor the school will often times call StudentLinc with the student present in the room. We use a toll-free number 1-888-881-5462 anytime day or night, 365 days a year. The services through SupportLinc are available to you and your benefit-eligible family members living in the same household.

SEE A-3: ADMINISTRATIVE STAFF (b) FOR RESPONSE AND EACH ADMINISTRATOR'S RESUME

4. <u>Faculty</u>.

<u>INSTRUCTIONS</u>: Please enter the requested information in the spaces provided below, or create an attachment to this application (labeled "A-4: Faculty") with your responses to the following questions. If complete and precise information is unavailable at this time, please provide projected staffing information including the faculty member's status as full or part-time.

(a) List all faculty that are to teach in the first year (or cycle) of the proposed programs at this location. For each faculty member provide the following information: COMAR 13B.02.01.07D(3)(m)

(1) the course(s) the faculty might soon teach;

(2) the degrees the individual holds;

(3) the degrees areas of specialization; and

(4) whether or not the faculty member is full-time or part-time (adjunct) at your parent institution .

See A-4 :Faculty (a) for a list of faculty

(b) Please include a curriculum vitae/resume for each potential faculty member. For those faculty who are yet to be hired include a job description and minimal qualifications.

(c) **Full-time faculty member** is defined as an employee: "(a) whose primary professional responsibility is instruction, research, scholarship, or service; (b) who performs those functions normally expected of a full-time faculty member at an institution of higher education, including curriculum development, student advising, and institutional service; (c) who is employed on an annual or renewable contract of at least 9 months long that stipulates an annual salary; and (d) who is not employed full-time by another employer." COMAR 13B.02.01.03(10)

Will more than 1/3rd of the classes offered be taught by full-time faculty of the parent institution?
☒ Yes ☐ No

Full-time Faculty Waiver. (See COMAR 13B.02.01.16E) If 1/3rd or less of the classes are taught by full-time faculty of the parent institution you will have to apply for a full-time faculty waiver. In order to obtain a waiver under the Regulations, please respond to the following:

(1) Demonstrate that the unique role, scope, and mission of the institution require a waiver in order for the institution to operate.

N/A

(2) After making this demonstration the institution shall then provide the following:

(i.) Designate by name the faculty members whose primary responsibility is instruction, scholarship, research or service who will perform the duties normally required of full-time faculty.
(ii.) Document that these designated faculty members substantially participate in the development or implementation of one or more of the following activities at the institution requesting the waiver: (A) Academic programs, (B) Professional Programs, (C) Research Programs, (D) Service Programs, (E) Admission or Admission policies, (F) Academic Advising, (G) Faculty Appointments, or (H) institutional governance.

(iii.) Document that the full time faculty, as a group, participate in all of the activities listed in (2)(ii.) above.

(iv.) Document that the designated faculty shall perform the requirements of full-time faculty under Section C of the regulations – i.e., at least one-third of the classes offered shall be taught by full-time faculty of the parent institution.

N/A

(3) **Documentation includes,** but is not limited to: (i) minutes of meetings; (ii) contractual obligations; or (iii) job descriptions.

(4) Your request will be considered at a regularly scheduled meeting of the Maryland Higher Education Commission.

5. Library Resources. Out-of-State Institutions offering programs or courses, or both, in Maryland, shall provide adequate and appropriate library resources within State boundaries and within reasonable distance

of the instructional site. Usage statistics shall be kept to determine to what extent these resources are available and accessible. COMAR 13B.02.01.17A

INSTRUCTIONS: Please enter the requested information in the spaces provided below, or create an attachment (labeled "A-5: Library Resources") to this application with your responses to the following questions.

(a) How are you planning to meet this standard on Library Resources? Briefly describe the types of materials and titles that you will make available to your students and how they will access them. Will there be provision for bibliographic instruction and/or library orientation?

Lincoln College of Technology (previously known at Lincoln Technical Institute) was originally established and has been in continuous existance in Maryland since September of 1960. Due to a recent reorganization in OPEID numbers, the Columbia campus has gone from being a single standalone Main Campus to an Additional Location of Lincoln Technical Institute, New Britain, CT. This change necessitated the filing of this Out of State application with MHEC. Nothing has changed at the campus level.

Upon enrollment, students are required to have a personal device (laptop/computer/tablet) and internet access in order to login to the Canvas learning management system (LMS), access program related courseware, and participate fully in assignments and assessments both online and onsite. Lincoln's library resources are available onsite and online including: ProQuest Central Databases, two E-Book platforms (Safari Tech Books and Academic Complete), ProQuest Research Companion, ALLDATA Repair (Online), Mitchell1 ProDemand®, NAPA online, and Mandarin for cataloging, tracking collection circulation and maintaining inventory.

Although students have their own devices, they still have access to internet-ready computers in the Library/Learning Resource Center and a fully functional computer lab on campus which can be scheduled by Instructors or an Administrator for a special event. Canvas contains links for student resources and links to access the ProQuest databases. The campus computer lab is used primarily for certification testing.

The College provides a Library Orientation to all new students in their first module of instruction. The Orientation will provide students with the opportunity to become familiar with the current on-site library holdings as well as the College's virtual holdings available through a variety of databases. Degree students will receive additional training in the form of bibliographic instruction and citations.

ProQuest Central Databases. This resource provides a compilation of almost 40 of ProQuest's complete databases, with a variety of content types across over 175 subjects, making this the broadest single research resources available. ProQuest Central is made up of separate, fully searchable databases, which may be used together or separately. While ProQuest Central provides access to millions of much-coveted full text articles from thousands of scholarly journals, it also provides access to information not available in other aggregated resources such as: over 100,000 full text dissertations in the areas of business, psychology, physical sciences, health, education and more; over 455,000 working papers from organizations such as NBER and OECD; millions of up-to-date company reports, market and industry reports, and country profiles; and the most comprehensive collection of market, industry, and economic reports available on the market today. ProQuest also contains access to an EBook platform; ProQuest EBook Central, and a video platform Academic Video Online.

EBook Central is a collection of scholarly eBooks from leading publishers that includes over one million titles. EBook Central provides an ideal foundation for a college/university eBook collection. With coverage in all academic subject areas, EBook Central provide students and faculty with librarian-curated eBooks essential to successful teaching, learning, and research outcomes.

Academic Video Online is a comprehensive video subscription available in partnership with Alexander Street. It delivers ~ 68,000 titles spanning the widest range of subject areas including anthropology, business, counseling, film, health, history, music, and more. This collection also includes a variety of video material available with curricular relevance: documentaries, interviews, feature films, performances, news

programs and newsreels, demonstrations, and raw footage. Patrons will find thousands of award-winning films, including Academy®, Emmy®, and Peabody® winners. Academic institutions will find the most frequently used films for classroom instruction, plus newly released films and previously unavailable archival material.

ProQuest Research Companion is ProQuest's information literacy product. It was built to help students do more effective scholarly research and to support educators as they teach the core information literacy principles of finding, evaluating, and using information. Aligned both to ACRL Information Literacy and Common Core English Language Arts standards, Research Companion provides a framework and foundation for information literacy instruction. This product easily guides students through the research process and helps them develop their critical thinking and information literacy skills.

ALLDATA Repair (Online) is a powerful, easy-to-use online tool for shops of all sizes. The information is unedited and updated regularly with manufacturer sourced information. ALLDATA Repair, provides instant access to a single source of accurate, up-to-date OE-direct diagnosis, repair, and maintenance information. Available online 24/7 and automatically updated, ALLDATA's huge database offers students information covering more than 33,000 engine-specific vehicles. Repair procedures, diagrams and TSBs are specific to each vehicle for fast, factory-correct repairs. Students gain access through the campus computers and Wi-Fi network on campus as a part of the onsite component of the blended program.

Mitchell1 ProDemand®--ProDemand's car repair estimator helps students make more accurate diagnoses and write more accurate estimates using information from real-world repairs on the exact vehicle users are working on. Users gain insight from the most common components that need to be replaced for the DTC or symptom, along with the most common repairs that fixed the problem. When ready to start the repair, the access to the OEM specifications and procedures help students to get the job done. Students can also utilize the community of expert technicians to ask a question and receive answers. Features include:
•SureTrack – OEM and real-world repair information together in a single lookup
•Real Fixes – Industry insights based on actual repair orders and experiences from expert technicians
•Common Replaced Parts – Real-world data trends that guide you quickly to an accurate diagnosis
•1Search – Brings together complete repair information in a single lookup
•Top 10 Repairs – Dashboard provides the most common repair issues for the vehicle in your bay
•Wiring Diagrams– Industry-leading scalable diagrams with consistent formatting across all OEMs

Several online resources are used universally by Instructors and students (on-ground and online) in our skilled trades programs. They include:
•Occupational Search Engine https://www.onetonline.org/
•SDS, (formally MSDS), searchable database at http://complyplus.grainger.com/grainger/
•Gale Databases on Knox County Public Library at http://kcpl.lib.in.us/
•OSHA-10 training is available to students in all programs through one of two vendors that contract with Lincoln. These vendors are https://www.careersafeonline.com/ and https://www.clicksafety.com/
•Stanley Black & Decker University containing a large factory database and certifications: https://go.bluevolt.com/stanleyblackanddecker/s/ .

Individual programs have specific library resources to support Instructors, students and the curriculum, in general:

Auto students have access to several technician's databases including AllData, Mitchell and AVI OnDemand. All three are available to on-ground students. AllData and AVI OnDemand can be made available to online students upon campus registration with the vendor. Chilton's database is available through the Gale Databases on Knox County Public Library http://kcpl.lib.in.us/ . The ASE Foundation website gives a comprehensive list of e-learning training sites for instructors and students at https://www.aseeducationfoundation.org/elearning .

Additionally, Lincoln contracts with CDX Learning Systems, a third party content provider, to develop custom training materials that are made available to every automotive student. This auto-specific LMS serves as the "text" for all of the courses in the students' program.

Welding students have 24/7 access to a variety of learning tools through Millerwelds.com. This website has a very large database located in their "Resources" section containing welding guides, education and training, weld calculators, libraries for both articles and videos, newsletters, and more.

Pearson Learning has distance learning resources available for NCCER accredited programs including: Lincoln's EEST and Welding programs at https://www.pearson.com/us/higher-education/products-services-teaching/distance-learning-solutions/nccerconnect.html .

HVAC-R students have access to a variety of learning tools through the ESCO Learning Resource Center at https://elearning.escogroup.org/ . The school also uses instructional websites like www.HeatingHelp.com to supplement formal courseware.

Any programs with an electrical and electronics component can take advantage of Stanley Black & Decker University which contains a large factory database and certifications: https://go.bluevolt.com/stanleyblackanddecker/s/ .

Culinary and Baking and Pastry students have access to Pearson Learning's MyLab software as part of the tools offered by the publisher when the On Cooking book is used as the course text at https://www.pearsonmylabandmastering.com/northamerica/myculinarylab/ .

ProQuest also includes Thousands of culinary related material including eBooks, Scholarly Journals, videos and many relevant Publications including:
•Culinary Art and Anthropology; London
•Culinary Fictions: Food in South Asian Diasporic Culture; Philadelphia
•Culinary Herbs for Short-Season Gardeners; Canada
•Culinary Landmarks: A Bibliography of Canadian Cookbooks, 1825-1949; Toronto
•Culinary Linguistics: The chef's special; Amsterdam
•The Future of Post-Human Culinary Art: Towards a New Theory of Ingredients and Techniques
•Slurp! a Social and Culinary History of Ramen: Japan's Favorite Noodle Soup; Leiden
•Sustainable Culinary Systems: Local Foods, Innovation, Tourism and Hospitality; London

The College tracks library usage through a user sign in system. The tracking system allows us to assess user needs including computer access, study hall usage, access to printers, and classroom based research projects. The library is monitored by the Education Facilitator locally but access to the corporate librarian is available, when needed.

See A-5: Library Resources

(b) Library Waiver. In extraordinary circumstances, an out-of-State institution may request a waiver of the library requirement. **Are you requesting such a waiver?** ☐ **Yes** ☒ **No**

If Yes, this request shall be considered at a regularly scheduled meeting of the Maryland Higher Education Commission. The waiver may be granted if justified by the institution demonstrating in this application the following:

(i.) the specialized or technical nature of the institution's curriculum; or

N/A

(ii.) an executed contract or contracts with another library or libraries ensuring students adequate access to another appropriate collection either through location or through information technology.

N/A

6. <u>Student Services</u>. COMAR 13B.02.01.18 concerns student services and activities. These shall realistically reflect the stated objectives, purposes, and philosophy of the out-of-State institution. Further, an out-of-State institution shall ensure that all students have access to a well developed program of counseling, testing, advisement, orientation, financial aid, career development, and placement. The institution may determine the specific organization of services, as well as the resources and staffing provided, as long as provision for these services are made. Student activities that complement the instructional program are particularly encouraged. COMAR Section .18 also requires that the out-of-State credits, transcripts, graduates, and other essentials in accordance with standard practice. This includes the physical security and confidentiality of such records. The Section requires as well, a published statement of student rights, privileges, and responsibilities and the school's adherence to its student grievance procedures.

<u>INSTRUCTIONS</u>: Please enter the requested information in the spaces provided below, or create an attachment (labeled "A-6: Student Services") to this application with your responses to the following questions.

(a) How do you plan to implement the requirements for Student Services cited above?

Lincoln College of Technology (previously known at Lincoln Technical Institute) was originally established and has been in continuous existance in Maryland since September of 1960. Due to a recent reorganization in OPEID numbers, the Columbia campus has gone from being a single standalone Main Campus to an Additional Location of Lincoln Technical Institute, New Britain, CT. This change necessitated the filing of this Out of State application with MHEC. Nothing has changed at the campus level.

For over 60 years, Lincoln College of Technology has been allowed to operate as an approved post-secondary educational institution in Maryland. Over the years, the College has utilized a number of strategies to support our students while they pursue their educational goals. These support systems are available to both on-ground and virtual learners. Examples by department include:

Admissions –
The College employs a Director of Admissions and a team of eight (8) Admissions Representatives. Prospective students may be contacted via phone call, email or text message to set up a time to conduct a Career Planning Session (CPS). CPS's may be done in person at the campus or virtually via phone/computer/tablet using secure teleconferencing software. During a CPS, the Admissions Representative engages with the prospective student to discuss the student's current work and life situation and learn about future educational plans and vocational goals. Individuals are encouraged to invite friends and family members into the discussion to discuss concerns and garner support.

Admissions Representatives have the ability to do on campus or virtual building tours. Presentations are done using PowerPoint slide decks. Program and sales collateral is available in print and digital format. Program pricing is the same for on-ground and distance learning classes. Prospective students may apply online using the Admissions Portal.

During the CPS, prospective students are informed of the programs that require them to own a computer or tablet. Students may use presently owned technology, provided that the technology meets program requirements. Students may purchase new technology from the College or a third party provider of their choice.

The College has a relationship with Collegiate Housing Services, a leading provider of student housing, to provide affordable multi-student housing options to those students wishing to move closer to the campus.

Financial Aid –

Prospective students may meet with a member of the Lincoln College Financial Aid team at any point during the Admissions process – before, during and after enrollment. Appointments can take place either virtually using screen sharing software or locally (in person) at the campus. A team consisting of a Director and two financial aid representatives are located on campus.

Lincoln College of Technology is approved by the US Education Department to participate in the Title IV program including grants, loans, Federal Supplemental Educational Opportunity Grant (SEOG) and the Federal Work Study program. Financial aid is available to those who qualify. New students are directed to establish a FSA User Name and Password through www.studentaid.gov. Students are advised of the need to register with Selective Service and a review of default status is performed by financial aid staff members.
Students can navigate the financial aid process with the assistance of Lincoln's Financial Aid Counselors. Counselors are available to assist by phone using shared screen technology or on campus by appointment. The financial aid staff is also able to assist veterans and their dependents complete the Chapters 31, 33, and 35 processes.
In addition to Title IV and military funding, Lincoln College of Technology also offers institutional funding including institutional scholarships, grants and loans (LincCredit). LincCredit is available to all students based on the results of a credit check and a review of outstanding debt, charge offs and past loan defaults. Approvals may require the use of a primary borrower or a co-borrower when the student's credit history has blemishes.

As part of the financial aid process, all prospective students (and when applicable, parents or guardians) are referred to Lincoln's FA Portals – one for the student (https://fa.lincolnedu.com/) and one for the parent/guardian (https://parent.lincolnedu.com/parent/). Once logged in, prospective and active students and their parents/guardians have the ability to complete and electronically sign all required financial aid documents including master promissory notes, reference forms, FERPA notifications, estimated award letters, payment contracts, verification docs and entrance counseling documents, where students learn about borrowing rights and responsibilities for their loans.

Lincoln has partnered (contracted) with iGrad, a third party company, to provide enrolled students with access to online financial literacy modules and tools. Modules vary in length (averaging 20 - 60 minutes) and serve to better educate students and graduates of the nuances of budgeting and finances, borrower's obligations, borrower's rights and responsibilities, the importance and impact of credit scores and similar topics.

The month of April is designated as Financial Literacy month at each Lincoln campus. During the month, each campus schedules a series of on-site and virtual speakers to further educate our students on the importance of financial literacy. In line with federal regulations, Lincoln conducts both entrance counseling when students start school and exit counseling with students as they near program completion.

Education:
Education support begins early in the process by way of a New Student Orientation (NSO). NSO's are typically performed on-site but were conducted virtually using conferencing software during the pandemic lockdown.

During NSO, the Campus President and Academic Dean review a number of topics and policies including the importance of daily attendance, dress code, academic integrity, class schedules and scheduling, tutoring, the credit transfer policy, the course test out policy, academic advising, grade appeals, grading and satisfactory academic progress, Student Code of Conduct, Lincoln's Harassment Policy, the Student Complaint/Grievance procedure, Lincoln's excused absence policy, leaves and withdrawals, academic awards, weekly at-risk meetings, academic counseling sessions, soft-skill development and more.

NSO is also the place where the Education Facilitator reviews a variety of available support services available to students. Some of these services may have been reviewed during the

admissions and financial aid process but are repeated at the NSO including: availability of local housing through Collegiate Housing Services – a third party company with whom we contract, campus shuttle bus service to and from Baltimore (Camden Yards) and the New Carrolton MARC Station, Lincoln's food pantry of dry goods and precooked/frozen student-made meals, the Howard County Food Bank, the StudentLinc Referral Service phone number (1-888-881-LINC (5462)), the Student Suicide Prevention Hotline, Matco's Student Tool Discount program, Lincoln's vehicle diagnosis and repair service (repairs are made by students enrolled in the automotive program under the guidance of Lincoln Instructors who are ASE Certified Technicans), the campus' Student Veterans Association Chapter meetings and events, and services provided by the Howard County Office of Veterans and Military Families.

In the Lincoln world, Education and Student Services are inextricably linked. The Education Facilitator reports directly to the Academic Dean or the Campus President in the absence of the Dean. Meetings between the Campus President and the Dean and meetings between the Dean and her staff occur daily to identify student engagement and retention strategies.
Student attendance, engagement and retention are the Education department's top priorities with graduation as the intended outcome. These priorities and outcomes apply equally to on-ground and distance learning students.

At NSO, students are advised of the need to maintain a high level of class attendance. Students are advised that lateness and absences require notification of the Instructor or a member of the Education Department. When the student fails to notify the school, however, members of the Education staff (including the Instructor, Educational Facilitator, Education Supervisors and the Dean) will attempt to reach the student by phone, text or email. Contact attempts are initiated early in the day to see if we can get the student to attend class that same day – even if s/he is going to be late.

Several years ago, the College created a Shop Foreman program. A Shop Foreman is elected by the class to serve as a liaison between the class and the College's management team. The Shop Foreman works with the Instructor to locate missing students and the Shop Foreman has been instrumental in making College leaders know when students are in need academically, personally and professionally. Members of the Education Department and the Campus President meet with the Shop Foremen as a group to discuss campus needs and plan for program and facility upgrades (CapEx, consumables, tools and equipment).

A ten question online survey is administered regularly to students throughout their period of enrollment. The course survey is a way for students to give feedback on their program, the specific course they are taking, the course Instructor, equipment, consumables, books and learning platforms. By evaluating the data provided by students coupled with the feedback given by the Shop Foremen, the College manages to address the majority of student wants and needs before they become pressing.

As mentioned previously, Lincoln believes that strong class attendance and class participation are the best defenses against a failing grade. In situations where a student is still performing poorly and potentially failing a course, staff members from Education and Student Services meet with the student (virtually or in person) to help the student formulate an academic improvement plan. The student will also be told of the need to attend free tutoring sessions offered before and after class including the 2.5 hour break between afternoon and evening classes.
As part of the improvement plan, weekly meetings are held with the instructor and bi-weekly meetings are held with members of the Education team to discuss attendance, assignment submission, examination and project grades, and skill competency scores. The bi-weekly meetings (one at mid-course and one at end course) are formal Academic Advising sessions documenting attendance, behavioral, and performance deficits. At every meeting there is a discussion about grades, attendance, missing assignments, and competency performance. Mid-course advisories review progress toward academic improvement plan while end-course session review final grade, grade appeal procedure, and SAP advising.

At present, Lincoln offers classes four days a week, Monday through Thursday. Day sessions begin as early as 7:30 a.m. and end either five (5), seven (7), or eight (8) hours later depending upon the program. Evening programs start as early as 6 p.m. and end either 4 or 5 hours later. We offer only one afternoon program (welding) with a 1 p.m. start date ending five (5) hours later. Students enrolled in a distance learning course can log in at any time. A “new” day begins at with the scheduled start of class and ends 24 hours later. The benefit of Lincoln’s flexible shift (mornings, afternoons, evenings and DL) and 4 day school schedule is that it allows students to pick up full or part time work during the time that they are outside of school hours – especially Friday, Saturday and Sunday.

Incorporated in 1946, Lincoln now has 22 locations located in 14 different states including the Columbia, MD location. Lincoln College of Technology is accredited by the Accrediting Commission of Career Schools and Colleges. The parent company, Lincoln Educational Services maintains a corporate staff that provides support to the individual campuses while working to provide a campus model and programs that is similar in make-up and design company-wide. Approximately half of the Lincoln locations are deemed skilled trade schools (auto, HVAC, electrical and electronics, etc.) while the other half cater to technology and healthcare training (medical assisting, medical billing and coding, practical nursing, etc.). These similarities allow for the easy transfer of credits between various Lincoln locations without loss of credit or time spent pursuing a certificate or degree.

Our Corporate Office provides support to department of a campus in a variety of ways. Education benefits from this relationship in the areas of new program development, existing program curriculum updates, industry trend analyses, compliance and oversight, academic policy and procedure, Title IX guidance, hiring and HR support, new faculty training, IT support (infrastructure, helpdesk, technology planning, student database maintenance), data reporting and analysis, disability accommodations and more. Among the most valuable support tools are the reports that analyze Instructor performance (Instructor Score Card) and Student Retention and Graduation information.

As mentioned previously, Lincoln College of Technology is accredited by ACCSC. That said, there are several programs that are also programmatically accredited including automotive (by NATEF/ASE), electrical and electronics (by NCCER), and welding (by NCCER). Graduates of these accredited programs have the additional benefit of receiving credit toward years in the field so that they achieve certification and journeyman milestones sooner. As a programmatically accredited institution, students enrolled in these programs are allowed to take certification exams while still in school. Often times, this testing can be taken online either on-site or at a regionally certified testing center that offers test proctoring services.

A challenge that new graduates face upon entering the workforce is the employer expectation that they will have worksite situational awareness, business savvy, and above average soft skills. Lincoln works to provide students the tools to make the transition successfully by enrolling students in a course provided by third party content provider, Career Edge. Students are required to complete specific training modules in each class. Members of the campus’ Career Services team reinforce these principles by holding in-class role playing exercises both virtually and on-ground.

Student Services:
Lincoln provides additional services through the Education department that are geared at helping student to navigate personal and social issues. The services include two toll free numbers to third party providers of referral and acute mental crisis counseling and intervention. During NSO, students are made aware of a Suicide Hotline Number (1-800-273-TALK (8255)) and StudentLinc, a Student Resource Services Program offered through third party provider CuraLinc Healthcare (800-893-LINC). Employees are covered under a similar, yet different, provider under the Employee Assistance Program (EAP).

The Education/Student Services staff work together to recognize students' academic and attendance performance via on-ground and online recognition ceremonies wherein students receive Dean's List certificates (Culinary and Baking and Pastry) or Stars and Bars uniform patches (all other programs).

When a member of the Education/Student Services staff is made aware of a student having difficulty, that staff member works with the Academic Dean to set up a time to speak with the student. During these At-Risk Student Counseling sessions, the staff member will ask the student questions about home life, personal and family health, work schedule or work issues (work schedule, furlough, and loss of job), substance abuse issues, mental health issues, child/parent care, looming expenses and shutoff notices, transportation issues, homelessness, hunger and more.

As the conversation progresses, the staff member works to assess the student's needs and formulate plan of action to address some/all of the identified issues. The school does its best to address immediate needs related to hunger by making food available from the meals prepared by students enrolled in the College's culinary program, canned foods available from our on campus food pantry, or referrals to local soup kitchens and the Howard County Food Bank.
If a student is homeless, we take the student to the financial aid office to reassess the student's packaging and determine eligibility for institutional loans. Additionally, the College maintains a student relief fund that we have used to supply students with gas and bus cards, assist with utility shutoffs, and more. An added benefit of attending the College is that students with registered and insured cars are able to have their cars diagnosed and repaired for free by students enrolled in the automotive program under the supervision of our ASE certified Instructors. All the car owner needs to do is buy the parts. That said, the school has, on occasion, purchased the car parts and allowed the student to pay the College back over time.

While we would like to save every student, we also realize that not every student benefits from being in school at the present time due to competing life priorities. During attendance and academic advising session, the Dean and Campus President have recommended, on occasion, that a student take leave from the College to address pressing issues before returning to school to finish their certificate or degree.

Students with disabilities are serviced in a number of ways by the College. Every prospective student is encouraged to discuss needs and accommodations at the time of their Career Planning Session with an Admissions Representative. If an accommodation is requested by a prospective student, the Admissions Representative asks the person to fill out an accommodation request form. Once received from the prospective student, the form is forwarded to the Academic Dean to review. The Academic Dean works with members of the corporate staff to determine if the requested accommodation is reasonable, warranted and whether the accommodations requested will allow the student to navigate a rigorous curriculum while still preparing the prospective student for employment in the field.

Lincoln schedules a time for the Dean, Campus President and prospective student to meet to discuss the course requirements in detail. The student is encouraged to bring in family members or friends who may add to the discussion. Depending upon the outcome of the meeting, the student may be invited to participate in a day of classes to help determine if the program is appropriate. Students who have gone through previous schooling with an IEP are asked to participate in Student Success Planning sessions where learning, testing and hand-on strategies are discussed. As mentioned previously, free tutoring is available to all students before and after class.

Lincoln has partnered with Matco Tools to provide automotive students access to the Matco Student Tool Discount program. Students are encouraged to take advantage of the program but are warned against taking on a significant amount of additional debt.

Lincoln encourages all veterans to participate in the Columbia campus' chapter of Student Veterans of America (SVA). Lincoln forwards copies of emails sent by the Howard County Office of Veterans and Military Families to all members of the Lincoln family. In pre-Covid times, the Columbia campus hosted quarterly veteran focused events and had a branded SVA lounge area for all veterans to use. The lounge contains sofas and lounge chairs as well as a computer with Internet and printer access.

Business Office:
Staffed with a Director and three clerks, the Business Office is open Monday through Thursday from 7:30A to 7P for students to make payments. Students are also able to make virtual payments through the Student Portal. Students with special financing needs are able to meet with members of the Business Office in person or by phone.

The Business Office oversees the operation of the campus' shuttle buses to Baltimore (Camden Yards) and New Carrolton (MARC Station). Students are able to ride the shuttle for free on an exception basis ("my car broke down") or on a monthly fee basis for those needing daily service. Often times, these costs are included in the student's financial aid packaging.

The College's Bookstore falls under the Business Office. It is open on an "as needed" basis – with students coming to the payment window to tell the clerk that they need to pick up uniforms, tools, books, technology, and/or review materials. ID cards and replacement items are also available for sale. In the event that a student is unable or unwilling to come to the campus for their materials, we are able to ship them to a student's physical address.

Career Services:
Career counseling, referral and placement services are available to students and graduates through the Career Services department. Staffed by a Director and two full time representatives, the mission of the team is to identify and uncover industry and employer hiring and match them to the employment needs of current students, recent graduates and returning graduates.

The Career Services team works with students throughout the student lifecycle. Students are given assignments to complete in Career Edge (mentioned previously) and these lessons are reinforced during in-class presentations done virtually using Microsoft Teams and on-ground. The sessions focus on Career Planning, Resume Writing, Mock Interviewing, Social Media Awareness, Application Completion (Paper and Digital), and Dressing for Success. These sessions may be done with students individually or in a group. Please note that the Career Services department maintains a small Clothes Bank for students needing to borrow or take "interview" clothing.

On a weekly basis, the Career Services department schedules employers for "Lunch and Learn" sessions (virtually and on-ground). During these 60 minute presentations, a variety of employers are given access to specific classes to give students a "real life" look at the profession from the stand point of a recognized expert in the field. Students are encouraged to ask questions and employers are encouraged to sell the benefits of working specifically for their company. Additionally, many employers take this opportunity to make a donation of used and new equipment for students to work on that day or in future lessons. Many an employer/student match has been made at these sessions.

The Career Services department hosts four (4) full-time work Job Fairs annually. Invitees include employers from the following industries: automotive, HVAC, electrical and electronics, welding and culinary arts. Two fairs focus on Day students and two fairs focus on evening students. That said, any student is allowed to attend any Job Fair with resume in hand. Traditionally, Job Fairs were held on-ground but in pandemic times, job fairs are being held virtually using Microsoft Teams. Both methods have proven to be successful methods for matching employers to student job seekers. The campus also holds part-time job fairs for employers seeking workers for short-term employment offering flexible hours and weekend work (e.g. restaurants, big box stores, etc.).

It should be noted that the members of the Career Services department are actively involved with the Howard Chamber of Commerce and Rebuild Howard County. The Career Services Director actively serves on two of the Chambers Committees (Education and Legislative). Involvement means that they attend monthly meetings held at chamber member's businesses, specialty speaker, and HC Chamber after hour's events. The relationships that have developed as a result of this involvement have served the College well allowing us to better integrate into the fabric of the community.

Information Technology:
Given that technology plays such a large part in a student's educational experience, the campus maintains a full-time IT administrator for on-campus and distance learning support. Additional assistance is available to students through Lincoln's Student Portal and through third party providers supporting their respective products (CampusVue, Canvas, Pearson's MyLabs).

If the local IT administrator is unable to solve a student issue, further support is available from our corporate IT department. Corporate IT is responsible for network security, backbone and infrastructure, corporate and campus equipment expenditures (emergency and planned CapEx), campus Wi-Fi (primary and redundancies), telephone systems, printers, copiers, and more. Additionally, students who have purchased technology from Lincoln are eligible to receive direct support from Apple (culinary and IBP students) or Dell through Dell's Premier Pro Support Plan. The support includes hardware and software support for the Apple IOS, Microsoft OS and related MS Office productivity software support.

Loaner units are available to students enrolled in any Lincoln program. There is no cost for this benefit provided that the student returns the technology in working condition. That said, the campus maintains a computer lab equipped with 24 computer for student use and several computers with specialty software are located throughout the campus to support program and library objectives. More information is available under "Library".

Industry Training Partnership (ITP) Division:
Lincoln's strength lies in the fact that it has 22 locations in a 14 states. Each campus offers a different selection of academic programs of study and by extension, has special relationships with specific manufacturing partners that makes for unique training opportunities for our graduates. So not only can students transfer course credits between campuses (provided that program offerings are similar) but there are a host of post-graduate opportunities available to students who have excelled academically and maintain excellent attendance standards.

The Columbia campus offers students/graduates the opportunity to enroll in manufacturer specific training programs that prepare the student for a career with that manufacturer or a dealership. Training includes a combination of instructor led lecture and hands-on training and manufacturer sourced digital training materials. Hands on exercises play a large part in student success. At the present time, the Columbia campus provides training for Audi and Toyota. A Mazda training partnership is due to start in Columbia, MD during the summer of 2021. Several other Lincoln campuses have partnered with manufactures like BMW/MINI Cooper, Chrysler/Fiat, Hussmann and Johnson Controls, Inc.

Each partnership works in a slightly different way. For BMW and Hussmann, there is an application and interview process that the student needs to complete in order to be accepted into the program. There is no direct cost to the student but the student must commit to work for the company for 1-2 years. Mazda and Chrysler/Fiat are set up so as enhanced "awareness programs" where students elect to participate in optional/enhanced training exercises while they are enrolled in the campus' Automotive Technology programs. The hope is that upon graduation the graduate is viewed as being a more desirable candidate for employment with the manufacturer.

At the present time, the Columbia Campus has contractual training relationship with Audi. The Audi program is an available option for students who wish to enroll in the program, meet the attendance and academic requirements and pay for the training. We are working to create similar training opportunities with Toyota and Johnson Controls in the future.
At the end of the day, Lincoln's desire to offer a portion of its curriculum via distance learning still requires that our students participate in hands-on learning in order to gain the knowledge, skill and proficiency that will them to work as an entry-level skilled tradesman in their program of study.

Facility:
LCT occupies approximately 110,000 sq. ft. of space at 9325 Snowden River Parkway in Columbia, MD. An appropriate number of classrooms and learning labs have been made available to support the learning outcomes of each program offered by the College.
In a pre-covid world, the Columbia Campus maintained several student areas for eating, studying, and quiet time including a large student cafeteria, culinary café (Open to Culinary and Baking students), Veteran's Lounge, Campus Library and Culinary Library. Unfortunately, the Veteran's Lounge, student cafeteria and culinary café areas are closed at this time due to Covid social distancing concerns. Library areas have limited capacity at this time for the same reason. Administrative staffers have individual offices in which to complete their daily tasks. Students and members of the public are encouraged to make an appointment so that we can best accommodate their needs while ensuring that social distancing requirements are met.

Library:
As mentioned previously, the campus maintains two student library areas both on campus and as an online presence. Both libraries open at 7:30 a.m. and close at 10 p.m.
The Main Library supports students enrolled in the Automotive, Welding, HVAC-R, and Electrical and Electronics programs. The Culinary library supports students enrolled in the Culinary and Baking and Pastry programs.
The College uses Mandarin for cataloging, tracking collection circulation and maintaining inventory. The College subscribes to ProQuest - a collection of many online databases that allows students to explore millions of resources from scholarly journals, books, newspapers, videos and more. Access is available 24 hours a day, 7 days a week. This resource is particularly relevant to degree seeking students.
The College uses Canvas as its Learning Management System. Canvas contains links for student resources and links to access the ProQuest databases.
Several online resources are used universally by Instructors and students (on-ground and online) in our skilled trades programs. They include:
• Occupational Search Engine https://www.onetonline.org/
• SDS, (formally MSDS), searchable database at http://complyplus.grainger.com/grainger/
• Gale Databases on Knox County Public Library at http://kcpl.lib.in.us/
• OSHA-10 training is available to students in all programs through one of two vendors that contract with Lincoln. These vendors are https://www.careersafeonline.com/ and https://www.clicksafety.com/
• Stanley Black & Decker University containing a large factory database and certifications: https://go.bluevolt.com/stanleyblackanddecker/s/ .

Individual programs have specific library resources to support Instructors, students and the curriculum, in general.
Auto students have access to several technician's databases including AllData, Mitchell and AVI OnDemand. All three are available to on-ground students. AllData and AVI OnDemand can be made available to online students upon campus registration with the vendor. Chilton's database is available through the Gale Databases on Knox County Public Library http://kcpl.lib.in.us/ . The ASE Foundation website gives a comprehensive list of e-learning training sites for instructors and students at https://www.aseeducationfoundation.org/elearning .

Additionally, Lincoln contracts with CDX Learning Systems, a third party content provider, to develop custom training materials that are made available to every automotive student. This auto-

specific LMS serves as the “text” for all of the courses in the students’ program. Learning materials are presented and available to the student through the CDX learning platform.
Welding students have 24/7 access to a variety of learning tools through Millerwelds.com. This website has a very large database located in their “Resources” section containing welding guides, education and training, weld calculators, libraries for both articles and videos, newsletters, and more.

Pearson Learning has distance learning resources available for NCCER accredited programs including Lincoln’s EEST and Welding programs at https://www.pearson.com/us/higher-education/products-services-teaching/distance-learning-solutions/nccerconnect.html

HVAC-R students have access to a variety of learning tools through the ESCO Learning Resource Center at https://elearning.escogroup.org/ . The school also uses instructional websites like www.HeatingHelp.com to supplement formal courseware.
Electrical and Electronics – Stanley Black & Decker University containing a large factory database and certifications: https://go.bluevolt.com/stanleyblackanddecker/s/ .
Culinary and Baking and Pastry students have access to Pearson Learning’s MyLab software as part of the tools offered by the publisher when the On Cooking book is used as the course text at https://www.pearsonmylabandmastering.com/northamerica/myculinarylab/ .
The American Culinary Federation’s website is full of training videos, recipes, current trend articles and information about jobs and positions available at https://www.acfchefs.org/ACF/Resources/ACF/Resources/ .

The National Restaurant Association’s website has training videos for both the culinary side and front of house. It also includes articles on current industry trends and information about jobs and positions that are currently available at https://www.restaurant.org/home .

The International Association of Women Chefs & Restaurateurs' (WCR) was founded in 1993. The organization’s mission is to advance the voice of women across the culinary industry through education, connection, promotion, and inspiration. Scholarship, networking and partnership information is available at https://womenchefs.org/ .

Les Dames d'Escoffier DC is a non-profit 501 (c) (3) invitational organization of women leaders in the food, beverage, hospitality, and related industries who use their talents and influence for community outreach and through grants, mentoring, scholarship and educational programs, to help support women to succeed in these industries. Membership is by invitation only but the organization serves as a resource for our students at https://www.lesdamesdc.org/ .

The Chaîne des Rôtisseurs is the world’s oldest international gastronomic society, founded in Paris in 1248. It is devoted to preserving the camaraderie and pleasures of the table and to promoting excellence in all areas of the hospitality arts. Each year the society sponsors young chef and sommelier competitions that attract contestants from throughout the world, while the Chaîne Foundation provides scholarships for students in these fields. Scholarship, networking and partnership information is available at https://www.chaineus.org/ .

Restaurant Business Insider has information on industry trends, challenges during Covid, and things that are happening in industry on daily basis. They also have good webinars that are free at https://www.restaurantbusinessonline.com/ .

Additional culinary and baking resources are available to students through the following organizations: World Central Kitchen, James Beard Foundation, IAPC (International Association of Professional Chefs), Think Food Group, and World Association of Chef Societies.

SEE A-6: STUDENT SERVICES (a)

(b) Regarding student records describe the security measures the institution takes to ensure the confidentiality, physical, and electronic security of your record-keeping system.

Physical documents are kept on campus in locked fire proof cabinets in a room with an installed sprinkler system. Lincoln College of Technology uses CampusVue as its student management system and Canvas as its LMS. Lincoln has entered into a licensing agreement with both parties to use these products. Each company, (Anthology and Pearson), maintains their own website and employs the appropriate security measures to safeguard the information contained therin. CampusVue and Canvas are widely used in the field of education by hundreds and hundreds of institutions nationally.

SEE A-6: STUDENT SERVICES (b)

(c) Does the institution have a published statement of rights, privileges, and responsibilities of students?
☒ **Yes** ☐ **No** How will it make this available to its students at the proposed instructional site? catalog given at enrollment
If this statement is in the Catalog you submitted with the application, please indicate the page number: 37
If not in the Catalog you submitted, please provide us with a copy of the statement.

(d) Does the institution have a published student grievance procedure? ☒ **Yes** ☐ **No** If this procedure is in the Catalog you submitted with the application, please indicate the page number 34. If not in the Catalog you submitted, please provide us with a copy of the grievance procedure.

7. Facilities. (See COMAR 13B.02.01.19).

INSTRUCTIONS: Please enter the requested information in the spaces provided below, or create an attachment (labeled "A-7: Facilities") to this application with your responses to the following questions.

(a) Has a specific facility been identified? ☒ Yes ☐ No

(b) Has the proposed facility been inspected and approved for use as classroom/laboratory space and been found in compliance with local and State ordinances pertaining to fire and safety? ☒ Yes ☐ No

(1) If yes, please provide a copy of the Certificate of Compliance.

(2) If no, the Certificate of Compliance must be submitted at least 30 days prior to the start of classes.

(c) Describe any special instructional facilities and equipment (computers, audio-visual equipment, etc.) that will be used and available to students in this location.

The College maintains a single computer lab for student use. This lab contains 24 networked computers with printer access. Please note that each student, at the time of enrollment, is made aware of the need to have a computer/tablet that meets the technical requirements of the program for which they enrolled. Technology can be purchased from the College, a technology retailer, or the student can use technology that they already own, provided that it meets the technical requirements for the program.

Each Instructor has been assigned a laptop for their professional use. Each laptop is equipped with a web camera. Docking stations are available in the classroom providing access to the College's network for storage, printing, scanning and faxing. Loaner laptops are available in the event of device failure.

Each classroom has a networked overhead projector and speaker system. Several classrooms have been outfitted with additional camera technology to better serve students engaged in distance learning.

As a technical college, almost all of our rooms contain equipment and/or trainers specific to the subject matter being taught. We have three production kitchens featuring equipment found in small restaurants and large banquet facilities. Several of our automotive classrooms feature car lifts and equipment typical to the class being taught including tire changers, wheel balancers, transmissions, engines with start carts, HVAC recovery machines, and all types of automotive electrical trainers. Our HVAC classrooms contain multiple stations to learn the basics of refrigeration and electricity (16 stations per classroom). Other HVAC classrooms feature equipment used to generate and dissipate heat (steam/natural gas/oil) in both residential and commercial settings as well as modern "rack style" refrigerators normally seen in the frozen food section of the local supermarket.

SEE A-7: Facilites (c)

(d) Describe what provisions are being made for periodic repair and maintenance of buildings and grounds. What measures are being taken for campus security and fire protection? If dangerous or toxic materials are being handled, what provisions are being made for safe storage, handling and disposal?

The school either contracts with or has established a purchase order relationship with scores of local vendors to meet its repair and maintenance needs. Landscaping and snow removal is handled by Luv's Landscaping, plumbing is handled by W. H. Winegar and Sons, and electrical issues are handled by Power Factor. Johnson Controls (JCI) handles HVAC preventive maintenance and repairs. JCI also handles our fire inspections including fire panel and sprinkler system, ansel system and extinguishers. Waste collection is contracted through Republic Services. Baltimore Lock and Key handles our doors and locks while Stanley Security handles the electronic databases that allow for or prevent access through the use of digital identification cards.
For each of the previously listed vendors (and for the scores of vendors not listed herein) we have back ups - in case someone is unavailable for service. In the event that we run into difficulty finding a suitable vendor, we have the support of the building's management company and their vast network of support professionals.

The College conducts quarterly fire drills for the safety of day and evening students to meet fire safety guidelines. Annual fire and elevator inspections are also conducted.

The Howard County Fire Marshall performs regular safety and fire system inspections. Delaware Elevator conducts elevator maintenance while JCI does the elevator fire and safety inspection and Liberty Elevator conducts the annual MD elevator inspection.

The College uses a commercial in-ground fat separator to collect the waste oils generated in our student kitchens. This waste is collected, transported and processed by a licensed handler - Valley Proteins, Inc.

Used oil filters, waste motor oil, lubricants, and other waste fluids generated by our automotive programs are placed in government approved tanks/containers that are later collected, transported and processed by a licensed handler - Noble Oil Services.

The College's Auto lifts are inspected and certified annually by NovaEquip, LLC. Both of our compressors are inspected by MAC Inspection and Welding every other year.

SEE A-7 Facilities (d) for documentation of services

(e) Describe the office (and conference) space available to full and part-time faculty and administrators.

Each campus administrator and staff member has been assigned a private office that is large enough to complete the duties of his/her position and/or meet with students, family members or guests. When additional space is required, that person can use one of several large conference rooms located throughout the facility.

Faculty members are typically assigned a classroom that becomes his/her "home" room. Each teacher is assigned a laptop computer with a networked docking station that allows files to be stored/accessed locally or on the campus' network. Several networked printer, scanner, and fax machines are located throughout the facility to meet the needs of the instructional faculty.

Either before class starts or upon class completion, many faculty members use their "home" rooms to host private meetings - ensuring privacy by closing/locking the door. In addition to "home" rooms, each program (department) has an office where faculty members can store their files and meet privately with students. And, as mentioned previously, the facility has several large conference rooms that can be used at any time.

The campus does have two group use "faculty only" areas that are not currently being used due to Covid distancing restrictions.

SEE A-7: Facilites (e)

8. Distance Education. "Distance education" means course work for academic credit delivered by telecommunicated instruction to a physical space specifically reserved for the purpose of receiving the instruction, for example, a teleclassroom, and requires the payment of tuition or fees for the instruction. "Distance education" does not include telecommunicated instruction at the student's initiation via an individual personal computer. COMAR 13B.02.01.03(8). An institution operating in Maryland and delivering instruction in Maryland by distance education shall provide evidence to the Secretary of compliance with the standards of good practice found in COMAR 13B.02.01.21.

INSTRUCTIONS. Is the institution providing distance education as defined above? ☒ Yes ☐ No
If yes, please contact the staff at the Maryland Higher Education Commission for a copy of the Standards of Good Practice and provide evidence of compliance as an attachment (labeled "A-8: Distance Education") to this application.

Accreditation

ACCSC
Accrediting Commission of Career Schools and Colleges

2101 Wilson Boulevard, Suite 302
Arlington, Virginia 22201
703.247.4212
703.247.4533 fax
www.accsc.org

March 8, 2017

ELECTRONIC DELIVERY
GJohannesen@lincolntech.edu

Glenn Johannesen
Campus President
Lincoln College of Technology
9325 Snowden River Parkway
Columbia, Maryland 21046

School #M000198

Dear Mr. Johannesen:

At the February 2017 meeting, the Accrediting Commission of Career Schools and Colleges ("ACCSC" or "the Commission") considered the Application for Renewal of Accreditation submitted by Lincoln College of Technology ("LCT-Maryland") located in Columbia, Maryland. Upon review of the December 13, 2016 Team Summary Report and the school's response to that report, the Commission voted to grant LCT-Maryland **Renewal of Accreditation with Reporting.** The Commission's action renews the school's accreditation for a period of five (5) years going forward from February 2017.[1]

The mark of an accredited school is its commitment to continuous compliance with accrediting standards and continuous improvement. Accordingly, the Commission has included with this letter an ACCSC Reporting Enclosure, which requires LCT-Maryland to submit an interim report on its continued compliance with the Commission's standards as noted therein. The Commission has also included with this letter an ACCSC Institutional Enhancement Enclosure, which lists suggestions deserving LCT-Maryland's immediate attention and action.

Also included with this letter is an ACCSC Approved Program Enclosure as documentation of the school's approved programs. Although ACCSC accreditation is institutional in nature, all programs offered by the school must be approved by the Commission. LCT-Maryland will find the Commission's requirements for the addition of new programs and modifications to existing programs in the *Standards of Accreditation*.

In accordance with this action, the Commission will send the Certificate of Accreditation for LCT-Maryland under separate cover. Through the renewal of accreditation, LCT-Maryland has continued its partnership with other educators who are committed to providing programs of quality and to conducting their affairs with integrity. The Commission is confident that the school will take this responsibility seriously with consideration for the many other ACCSC-accredited institutions that have embraced accreditation as a means to enhance student learning and achieve educational goals.

The Commission expects that the school will adhere to the *Standards of Accreditation* on an on-going basis and as revisions are approved and disseminated. Please consult regularly the ACCSC website for updates, important due dates, initiatives, and special events planned for the benefit of the Commission's accredited institutions as well as instructions for the preparation and submission of the Annual Report, sustaining fees, and annual audit of the school's financial statements.

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[1] The Commission previously granted Lincoln College of Technology renewal of accreditation for five (5) years effective February 2012. Therefore, Lincoln College Technology's accreditation is effective for a period of five (5) years going forward from February 2017.

The mark of an accredited school is its commitment to continuous compliance with accrediting standards and continuous improvement. In accordance with *Section V (A) and V (C), Rules of Process of Procedure* of the *Standards of Accreditation*, the Commission is sending a letter under separate cover to the school's owner, Lincoln Educational Services Corporation, requiring the submission of an interim **Financial Report** on its continued compliance with the Commission's standards as noted therein.

****

For further assistance or additional information, please contact Nora Delgado at 703.247.4511 or ndelgado@accsc.org.

Sincerely,

Michale S. McComis, Ed.D.
Executive Director

c: Susan A. Birch
SBirch@lincolntech.edu

Encls.: ACCSC Approved Program Enclosure
ACCSC Reporting Enclosure
ACCSC Institutional Enhancement Enclosure
ACCSC Institutional Review Cover Sheet

Course descriptions from the College's catalog

1. Programs.

(c) Please provide a brief description of the student population to be served by the proposed program.

At present, there are approximately 580 active students enrolled in day and evening classes at Lincoln College of Technology in Columbia, MD.

Program Title	Students Enrolled
Air Conditioning, Refrigeration, & Heating Technology	151
Automotive Service Management	21
Automotive Technology	133
Automotive Technology with AUDI Education Partnership	61
Culinary Arts and Food Services	57
Electrical and Electronic Systems Technology	72
Electrical and Electronic Systems Technology Service Management	21
International Baking & Pastry	10
Welding and Metal Fabrication Technology	60

Air Conditioning, Refrigeration & Heating Technology

HV207C–LOWER DIVISION CERTIFICATE PROGRAM

DAY AND EVENING PROGRAMS

total program credits 45.0*
total instructional hours 1080

approximate weeks to complete–day . . . . . 40 (includes holidays and scheduled breaks)
approximate weeks to complete–eve . . . . . 74 (includes 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.**

CIP CODE: 15.0501 **SOC CODE: 49-9021**

program objective

Our collective concerns about the future health of the environment are at the heart of today's dynamic Heating, Ventilation, and Air Conditioning Technology industry, driving progressive changes through planning and implementation. The shift away from some of the more conventional HVAC systems still used in older residences and commercial buildings has been dramatic and continues to evolve. Newer systems focus on renewable energy sources, energy efficiency, and creating comfortable indoor environments.

One of the primary objectives of the HVAC curriculum is to introduce students to Green Technology concepts as they apply to HVAC systems. Students are prepared to confidently enter this vibrant field possessing fundamental skills required to service, troubleshoot, and repair commercial and residential indoor HVAC air management systems. Students also learn proper refrigerant recovery and recycling techniques, and are encouraged to complete Environmental Protection Agency (EPA) certification testing.

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	total credits	prerequisites
HV101A	**Introduction to Climate Control Systems**	**5.0**	
HV102A	**Electricity**	**5.0**	
HV105A	**Basic Refrigeration Systems**	**5.0**	
HV107A	**Air Conditioning Systems**	**5.0**	**HV102, HV105A**
HV108A	**Air Conditioning Design and Layout**	**5.0**	
HV109A	**Commercial Refrigeration Control**	**5.0**	**HV102, HV105A**
HV111A	**Commercial and Industrial Refrigeration and Air Conditioning Lab**	**5.0**	**HV102, HV105A**
HV112A	**Warm Air Heating**	**5.0**	**HV101A, HV102A**
HV120N	**Energy Efficiency and Green Technology Systems**	**5.0**	**HV101A, HV102A, HV107A, HV108A, HV112A**
	TOTALS	**45.0**	

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. Courses identified as requiring a prerequisite delivery are marked with a single asterisk (*), as noted in the course description.

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.

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15 9080 R1120

HV101A–INTRODUCTION TO CLIMATE CONTROL SYSTEMS

5.0 Credits

This course is designed to present the learner with an understanding of the principles of energy, heat, and combustion; basic refrigeration and the effects of temperature and pressure on liquids and gasses. Procedures used in the fabrication of tubing assemblies, cutting, bending, flaring, swaging and soldering are also taught. Pressure testing and leak detection procedures are also emphasized.

Students will learn to apply the basic theory of heat transfer, basic principles of energy and matter, and the application of safe work practices. They will learn to use the tools and equipment used by the HVAC-R technician and the proper selection of fasteners for particular tasks. Students will also learn the different types of tubing used in the HVAC-R industry and the types of jointing processes for different types of tubing.

Prerequisite(s): None

HV102A–ELECTRICITY

5.0 Credits

This course is designed to explore the sources and principles of electrical energy and its generation and control. Conductors, insulators, thermal and magnetic switching are discussed. Types and application of electric motors are emphasized. Procedures used in wiring panels and switching devices as well as single and poly-phase electrical systems are also discussed.

Students will learn how to apply safety procedures while working with electricity and electrical devices and equipment. They will learn to distinguish the difference between series and parallel circuits and how to apply principles of electricity to electrical formulas as they relate to basic circuits and equipment. Students will also learn to apply automatic controls used in the Heating, Ventilation, Air Conditioning, and Refrigeration industry. They will learn the application of various types of electric motors and controls used in the industry. In addition students will learn to diagnosis and troubleshoot electric motors and motor controls. In the process they will learn to use various types of test equipment.

Prerequisite(s): None

HV105A–BASIC REFRIGERATION SYSTEMS

5.0 Credits

This course is designed to present the student with the principles governing the operation of refrigeration systems and the refrigeration cycle. They will learn about refrigerants, compressors, evaporators, condensers, metering and control devices as well as service procedures, such as evacuating refrigerants and oil charging, leak detection and mechanical checks.

Students will learn how to plot a refrigeration cycle for refrigerants on a pressure/enthalpy diagram, choose a leak detector for a particular type of leak, perform two different types of evacuation, and perform a high side and triple evacuation. They will learn to charge a system using various methods. Students will also learn to diagnose and troubleshoot various problems within the refrigeration system.

Prerequisite(s): None

HV107A–AIR CONDITIONING SYSTEMS

5.0 Credits

This course is designed to provide the student with the necessary information about the various types of air conditioning systems, their characteristics and applications as well as combination systems. This course also explores the various components e.g.: compressors, motors, controls, and air handlers as well as servicing and troubleshooting of systems and controls.

Students will learn the parameters associated with psychometrics, how refrigeration applies to air conditioning, the process involved in installing an air conditioning system, the various types of controls used on air conditioning equipment, the conditions that affect air conditioning equipment and the proper troubleshooting and servicing techniques for air conditioning units.

Students will also learn to recognize the four factors involved in comfort and plot air conditions using a psychometric chart. They will learn to select the correct instruments for checking an air conditioning unit with a mechanical problem. Students will also learn to calculate the correct operating suction pressures for both standard and high efficiency air conditioning equipment under various conditions.

Prerequisite(s): HV102A, HV105A

HV108A–AIR CONDITIONING DESIGN AND LAYOUT

5.0 Credits

This course is designed to provide the student with the necessary information about theory of heat exchange as applied to heat and cooling loads as well as the calculation of those loads. A duct project is completed and tested during this course.

Students will learn the sources of indoor air pollution, the procedures for eliminating contamination sources, how molds reproduce, reasons for cleaning air ducts reasons for providing humidification in winter months, and factors used when sizing humidifiers.

Students will also learn to determine factors for evaporation requirements, plot airflow conditions on the air-friction chart, determine requirements for filtration systems, perform service inspections on humidifier units, perform load calculations, plot wet-bulb and dry-bulb temperatures, and calculate winter heat loss.

Prerequisite(s): None

HV109A–COMMERCIAL REFRIGERATION CONTROL

5.0 Credits

This course is designed to provide the student with necessary information about the theory and application of control for commercial refrigeration. Electro-mechanical or electronic controls include low pressure; high pressure; ambient head pressure; oil pressure; current and thermal overload; temperature; flow, freeze and short cycle control are emphasized. Circuits for pump down; off cycle, electric and hot gas defrost are wired. Evaporation pressure, head pressure, crankcase pressure and metering valves are studied.

Students will learn how commercial evaporators are controlled, the various types of controls used in a commercial system, the different applications of refrigeration control systems for commercial uses.

Students will also learn to identify and select the various types of expansion devices used in commercial systems; apply refrigeration control systems for commercial uses, and the service and troubleshooting of commercial refrigeration control systems.

Prerequisite(s): HV102A, HV105A

HV111A–COMMERCIAL AND INDUSTRIAL REFRIGERATION & AIR CONDITIONING LAB

5.0 Credits

This course is designed to provide the student with information about the various types of commercial ice making machines, their design, service and maintenance. Students are also presented with information on high-pressure, low-pressure, and absorption chilled water systems, cooling towers, and pumps. Troubleshooting, service, and maintenance are stressed.

Students will learn to read and interpret ice production and performance charts for ice machines. They will also learn the process of cleaning and sanitizing an ice machine as well as water filtration and treatment. Students will learn the relationship of cooling capacity of the water tower and the wet-bulb temperature of the outside air. And students will learn to troubleshoot, service, and maintain various commercial ice making machines.

Prerequisite(s): HV102A, HV105A

HV112A–WARM AIR HEATING

5.0 Credits

This course is designed to provide the student with the necessary information about service and repair of electric and gas warm air heating units. Combustion theory, efficiency testing, combustion air and vent design, heat exchanger types, blower motors, fans and control systems including thermostats are covered.
The student will learn how to identify the various types of automatic control components used and their applications. Students will learn how to perform basic tests in troubleshooting electrical problems in an electric forced-air furnace. Students will learn how to troubleshoot and service various electric and gas heat systems.

Prerequisite(s): HV101A, HV102A

HV120N–ENERGY EFFICIENCY AND GREEN TECHNOLOGY SYSTEMS

5.0 Credits

This course introduces HVAC students to Green Technology and its impact on the HVAC industry. They will be provided with an overview about green alternatives to comfort heating and cooling systems. Specific additional topics include learning methods for evaluating energy efficiency in any building structure and Solar Thermal and Geothermal Green Technologies. Students learn the fundamentals of Energy Auditing and the methods for conducting a mechanical and envelope evaluation, pressure analysis, and performing infrared imaging (Thermography). Students are encouraged to complete certification testing conducted either by GreenMech (Green Mechanical Council), BPI (Building Performance Institute) or RESNET (Residential Energy Services Network).
Students also learn the fundamentals of Solar Thermal and Geothermal energy systems. They learn the basic theory about each system and the functional components of each system. They learn to calculate to proper sizing for these systems and use trainers/simulators to visually reinforce concepts learned in the classroom.

Prerequisite(s): HV101A, HV102A, HV107A, HV108A, HV112A

Automotive Service Management

AUTO212AAS–ASSOCIATE IN APPLIED SCIENCE DEGREE PROGRAM

DAY PROGRAMS

total semester credit hours* . . .70.0*
total instructional hours . . . 1755
approximate weeks to complete–day 82 (including holidays and scheduled breaks)

Education Foundation

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

CIP CODE: 47.0604 SOC CODE: 49.3023

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 ser¬vice operations and under supervision, more specialized or involved tasks with a dealer, inde¬pendent shop or other service outlet. Students will be required to complete out-of-class assignments in each course.

program course list

number	course	total credits	prerequisites
CORE COURSES			
IN102C	Driving Your Performance	4.0	precedes all technical courses.
AT101C	Gasoline Engine Construction and Operation	4.0	IN102C
AT102C	Fuel and Emissions Systems	4.0	IN102C
AT103C	Electrical Systems	4.0	IN102C
AT106C	Transmissions and Drive Lines	4.0	IN102C
AT110C	Automotive Brake Systems	4.0	IN102C
AT204C	Driveability Diagnostics	5.0	IN102C, AT102C, AT103C
AT207C	Automatic Transmissions	4.0	IN102C
AT208C	Air Conditioning and Electrical Accessories	4.0	IN102C
AT209C	Advanced Automotive Electronics	5.0	IN102C, AT103C
AT211C	Automotive Steering and Suspension Systems	4.0	IN102C
MA201C	Service Shop Procedures	3.0	IN102C
	TOTAL CORE COURSE CREDITS	49.0	
GENERAL EDUCATION COURSES			
GEN190	English Composition I	3.0	Placement score above minimum level or GEN099.
GEN180	College Algebra	3.0	Placement score above minimum level or GEN089.
GEN160	Psychology	3.0	
GEN130	Introduction to Critical Thinking	3.0	
GEN292	Speech Communications	3.0	
GEN162	American Government	3.0	
GEN150	Environmental Science	3.0	
	TOTAL GENERAL EDUCATION COURSE CREDITS	21.0	
	TOTAL PROGRAM CREDITS	70.0	
DEVELOPMENTAL COURSES			
GEN099	Foundations of English	0.0	
GEN089	Basic Mathematics	0.0	

NOTE: Course numbers are for reference only. The sequence of course offerings may vary depending on scheduling needs.
Maximum Time Frame (MTF) = 105 Semester Credits.

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.

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IN102C–DRIVING YOUR PERFORMANCE

4.0 Credits

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

The automotive 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.

IN102C precedes all courses.

AT101C–GASOLINE ENGINE CONSTRUCTION AND OPERATION

4.0 Credits

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.

Prerequisite: IN102C

AT102C–FUEL AND EMISSIONS SYSTEMS

4.0 Credits

This course is designed to provide comprehensive coverage of late model gasoline fuel systems from the properties of gasoline to the 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.

Prerequisite: IN102C

AT103C–ELECTRICAL SYSTEMS

4.0 Credits

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.

Prerequisite: IN102C

AT106C TRANSMISSIONS AND DRIVE LINES

4.0 Credits

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.

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.

Prerequisite: IN102C

AT110C–AUTOMOTIVE BRAKE SYSTEMS

4.0 Credits

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.

Prerequisite: IN102C

AT204C–DRIVEABILITY DIAGNOSTICS

5.0 Credits

This course is designed to provide the student with knowledge of conventional and computerized engine control systems and scientific engine testing and tune-up. Students will receive detailed instruction on operating principles, testing, replacement and repair of the ignition 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 mechanical and electrical engine and control systems and determine needed action. Students will learn how to use diagnostic scan tools to retrieve engine, body, and other computerized control module trouble codes to determine condition, status, and determine needed action.

Prerequisite: IN102C, AT102C, AT103C

AT207C–AUTOMATIC TRANSMISSIONS

4.0 Credits

This course has been developed to provide 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 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.

Prerequisite: IN102C

AT208C–AIR CONDITIONING AND ELECTRICAL ACCESSORIES

4.0 Credits

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.

Prerequisite: IN102C

AT209C–ADVANCED AUTOMOTIVE ELECTRONICS

5.0 Credits

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.

Prerequisite: IN102C, AT103C

AT211C–AUTOMOTIVE STEERING AND SUSPENSION SYSTEMS

4.0 Credits

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.

Prerequisite: IN102C

MA201C–SERVICE SHOP PROCEDURES
3.0 Credits

This course is designed to provide the students with exposure to an actual shops environment, procedures, and protocol by applying prominent skills obtained in previous courses. Emphasis is placed on the removal and replacement of both engines and transaxles. Methods of securing future employment and the preparation of resumes are highlighted. 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: IN102C

GEN130–INTRODUCTION TO CRITICAL THINKING
3.0 Credits

This course presents students with techniques to develop their critical thinking skills. Topics include the six sequential steps of critical thinking, the importance of language, ambiguity, structure of arguments and creative problem solving. Upon successful completion of this course students should be able to demonstrate an improvement in their ability to apply critical thinking skills to real world situations.
Prerequisite: None

GEN150–ENVIRONMENTAL SCIENCE
3.0 Credits

This course is designed to provide students with a basic scientific overview of how nature works and how things in nature are interconnected. This course explores the study of the earth's natural resources. Topics include the study of how air, water, soil, natural energy, and the minerals are critical and related parts of the earth's interconnected systems.
Prerequisite: None

GEN160–PSYCHOLOGY
3.0 Credits

This course introduces human behavior. It includes the study of the theories and concepts of psychology including the scope of psychology, biological foundations and the brain, sensation, perception, motivation, personality, learning/memory, emotion, states of consciousness, personality theories, cognition, life-span development, and applied psychology.
Prerequisite: None

GEN162–AMERICAN GOVERNMENT
3.0 Credits

This course is designed to be an exploration of how American government formed in its constitutional roots and how it continues to develop. Topics will include how government is organized, its influencing factors, and the development of public policy.
Prerequisite: None

GEN180–COLLEGE ALGEBRA
3.0 Credits

This course focuses on algebraic concepts essential for success in the workplace and other courses. Using real world examples and applications, students practice fundamental operations with number systems, formulas, algebraic expressions and liner equations. This course also explores problems involving factoring, inequalities, exponents, radicals, linear equations, functions, quadratic equations and graphs. Skills for success in mathematics will be emphasized.
Prerequisite: None

GEN190–ENGLISH COMPOSITION I
3.0 Credits

Students develop written communication skills, with emphasis placed on the principles of effective communication which includes understanding the writing process, analysis of readings, as can be applied personally and professionally.
Prerequisite: None

DEVELOPMENTAL COURSES

Students enrolled in the Associates Degree programs will be required to either;

Provide documentation verifying a combined SAT score of 1350 or higher, or ACT score of 17 or higher in both Math and English. OR Take the placement test measuring both Math and English proficiency and attain a passing score. Testers not receiving a passing score will be required to take a development course in English, Math or both. Those students required to take Developmental Courses in either Math or English must successfully complete the Developmental course before taking the subsequent math or English college level course. The Developmental course will be graded as either PD (Pass Developmental) or NPD (Not Passed Developmental) and shall not enter into the GPA calculation and will not be applied toward graduation requirements.

GEN099–FOUNDATIONS OF ENGLISH
0.0 Credits

This course is designed to give students guided practice in the fundamental skills they will need to complete college-level reading and writing assignments. Mastery and review of Basic English concepts, essential to successful college and work experience, will be emphasized throughout the course. Students will apply their learning to a variety of writing activities that emphasize the development of paragraphs and essay.
Prerequisite: None

GEN089–BASIC MATHEMATICS
0.0 Credits

This course focuses on concepts and applications of arithmetic, including whole numbers, fractions, ratios, proportions, the decimal system, and percent's. Brief introductions to algebra, formulas, algebraic expressions, and linear equations are also included. Special emphasis is placed on the application of basic math skills to common workplace problems and real-life situations.
Prerequisite: None

Automotive Technology with AUDI Education Partnership

AT105LDAU– LOWER DIVISION CERTIFICATE PROGRAM

DAY/EVENING PROGRAMS

total semester credit hours* 59.0
total instructional hours 1680
approximate weeks to complete–day . . . . 62 (includes holidays and scheduled breaks)
approximate weeks to complete–eve . . . . 113 (includes 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.**

CIP CODE: 47.0604 SOC CODE: 49-3023

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

program requirements

Students enrolled in, or who choose to transfer to, the Automotive Technology with AUDI Partnerships program must maintain a minimum cumulative GPA of 2.50 throughout the length of their training. Students must also maintain a 90% or better attendance record. Failure to maintain these standards may result in the student's inability to continue participating in the program. Those students who are no longer eligible to participate in the AUDI Partnerships program may be allowed to continue fulfilling the requirements necessary to graduate from the Automotive Technology lower division certificate program.

number	course	semester credits	prerequisites
IN102C†	Driving Your Performance	4.0	precedes all courses
AT101C	Gasoline Engine Construction and Operation	4.0	IN102C
AT102C	Fuel and Emissions Systems	4.0	IN102C
AT103C	Electrical Systems	4.0	IN102C
AT204C	Driveability Diagnostics	5.0	IN102C, AT102C, AT103C
AT106C	Transmissions and Drive Lines	4.0	IN102C
AT207C	Automatic Transmissions	4.0	IN102C
AT208C	Air Conditioning and Electrical Accessories	4.0	IN102C
AT209C	Advanced Automotive Electronics	5.0	IN102C, AT103C
AT110C	Automotive Brake Systems	4.0	IN102C
AT211C	Automotive Steering and Suspension Systems	4.0	IN102C
MA201C	Service Shop Procedures	3.0	IN102C
AU101C	Audi Electrical Systems and Service	5.0	IN102C, AT101C, AT102C, AT103C, AT204C, AT208C, AT209C, AT110C, AT211C
AU102C	Audi Advanced Diagnostics and Occupant Safety Systems	5.0	IN102C, AT101C, AT102C, AT103C, AT204C, AT208C, AT209C, AT110C, AT211C, AU101C
	TOTALS	59.0	

Note: Course numbers are for reference only. The sequence of course offerings may vary depending on scheduling needs. Maximum Time Frame (MTF) = 88.5

† **IN102C Driving Your Performance must precede all automotive courses.**

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.

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IN102C–DRIVING YOUR PERFORMANCE
4.0 Credits

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

The automotive 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.

IN102C must precede all automotive/diesel courses.

AT101C–GASOLINE ENGINE CONSTRUCTION AND OPERATION
4.0 Credits

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.

Prerequisite: IN102C

AT102C–FUEL AND EMISSIONS SYSTEMS
4.0 Credits

This course is designed to provide comprehensive coverage of late model gasoline fuel systems from the properties of gasoline to the 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.

Prerequisite: IN102C

AT103C–ELECTRICAL SYSTEMS
4.0 Credits

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.

Prerequisite: IN102C

AT204C–DRIVEABILITY DIAGNOSTICS
5.0 Credits

This course is designed to provide the student with knowledge of conventional and computerized engine control systems and scientific engine testing and tune-up. Students will receive detailed instruction on operating principles, testing, replacement and repair of the ignition 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 mechanical and electrical engine and control systems and determine needed action. Students will learn how to use diagnostic scan tools to retrieve engine, body, and other computerized control module trouble codes to determine condition, status, and determine needed action.

Prerequisites: IN102C, AT102C, AT103C

AT106C–TRANSMISSIONS AND DRIVE LINES
4.0 Credits

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.

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.

Prerequisite: IN102C

AT207C–AUTOMATIC TRANSMISSIONS
4.0 Credits

This course has been developed to provide 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 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.

Prerequisite: IN102C

AT208C–AIR CONDITIONING AND ELECTRICAL ACCESSORIES
4.0 Credits

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.

Prerequisite: IN102C

AT209C–ADVANCED AUTOMOTIVE ELECTRONICS
5.0 Credits

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.

Prerequisites: IN102C, AT103C

AT110C–AUTOMOTIVE BRAKE SYSTEMS
4.0 Credits

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.

Prerequisite: IN102C

AT211C–AUTOMOTIVE STEERING AND SUSPENSION SYSTEMS
4.0 Credits

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.

Prerequisite: IN102C

MA201C–SERVICE SHOP PROCEDURES
3.0 Credits

This course is designed to provide the students with exposure to an actual shops environment, procedures, and protocol by applying prominent skills obtained in previous courses. Emphasis is placed on the removal and replacement of both engines and transaxles. Methods of securing future employment and the preparation of resumes are highlighted. 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: IN102C

AU101C–AUDI ELECTRICAL SYSTEMS AND SERVICE
5.0 Credits

Introduction to Audi products and systems; Students will become familiar with the Audi vehicle series and consumer features. Students will be able to operate and explain these features to the customer. Students will be able to conduct a Pre Delivery Inspection, identify concerns and make corrections prior to vehicle delivery. Students will understand and perform standard vehicle maintenance which includes general vehicle maintenance, proper tire mounting and balancing, along with a thorough understanding of tire road force balancing. Students will become familiar with Roadside Service procedures along with technician and customer safety. Students will be introduced to Audi diagnostic tools and reference sources and be able to operate and access the same. Students will be able to understand and perform repairs to the vehicle electrical systems to include both networked and non-networked elements. Students will be able to understand and perform repairs to the battery, starting, and charging systems, parasitic draw and battery management. Students must register for and complete online course requirements in vehicle maintenance and light repair.

Prerequisite: IN102C, AT101C, AT102C, AT103C, AT204C, AT208C, AT209C, AT110C, AT211C

AU102C–AUDI ADVANCED DIAGNOSTICS AND OCCUPANT SAFETY SYSTEMS
5.0 Credits

This course is designed to provide the student with a more in-depth knowledge of electrical and electronic principles, and advanced circuit applications. Introduction to Audi advanced diagnostic systems, troubleshooting, and occupant safety; Students will continue to use Audi diagnostic tools and develop their skills in order to properly diagnose vehicle concerns and issues. Students will use Audi specific scan tools for in-depth diagnostics and addressing customer vehicle concerns, along with identifying communication protocol. Students will understand vehicle coding, diagnostics, locating system faults, and making system repairs. Students will understand operation and diagnostics of the Audi Airbag Safety Systems, and be able to take corrective actions to ensure passenger and occupant safety.

Prerequisite: IN102C, AT101C, AT102C, AT103C, AT204C, AT208C, AT209C, AT110C, AT211C, AU101C

Automotive Technology

AUTO105LD–LOWER DIVISION CERTIFICATE PROGRAM

DAY AND EVENING PROGRAMS

total semester credit hours . . . 49.0*
total instructional hours . . . 1440
weeks to complete–day . . . . .52 (includes holidays and scheduled breaks)
weeks to complete–eve . . . . .98 (includes holidays and scheduled breaks)

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

CIP CODE: 47.0604 **SOC CODE: 49.3023**

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

program course list

number	course	total credits	prequisites
IN102C	**Driving Your Performance**	**4.0**	**precedes all courses**
AT101C	**Gasoline Engine Construction and Operation**	**4.0**	**IN102C**
AT102C	**Fuel and Emissions Systems**	**4.0**	**IN102C**
AT103C	**Electrical Systems**	**4.0**	**IN102C**
AT204C	**Driveability Diagnostics**	**5.0**	**IN102C, AT102C, AT103C**
AT106C	**Transmissions and Drive Lines**	**4.0**	**IN102C**
AT207C	**Automatic Transmissions**	**4.0**	**IN102C**
AT208C	**Air Conditioning and Electrical Accessories**	**4.0**	**IN102C**
AT209C	**Advanced Automotive Electronics**	**5.0**	**IN102C, AT103C**
AT110C	**Automotive Brake Systems**	**4.0**	**IN102C**
AT211C	**Automotive Steering and Suspension Systems**	**4.0**	**IN102C**
MA201C	**Service Shop Procedures**	**3.0**	**IN102C**
	TOTALS	**49.0**	

NOTE: Course numbers are for reference only. The sequence of course offerings may vary depending on scheduling needs.

†**IN102C Driving Your Performance must precede all courses.**

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.

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IN102C–DRIVING YOUR PERFORMANCE
4.0 Credits

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

The automotive 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: IN102C precedes all courses.

AT101C–GASOLINE ENGINE CONSTRUCTION AND OPERATION
4.0 Credits

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.

Prerequisite: IN102C

AT102C–FUEL AND EMISSIONS SYSTEMS
4.0 Credits

This course is designed to provide comprehensive coverage of late model gasoline fuel systems from the properties of gasoline to the 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.

Prerequisite: IN102C

AT103C–ELECTRICAL SYSTEMS
4.0 Credits

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.

Prerequisite: IN102C

AT106C TRANSMISSIONS AND DRIVE LINES
4.0 Credits

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.

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.

Prerequisite: IN102C

AT110C–AUTOMOTIVE BRAKE SYSTEMS
4.0 Credits

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.

Prerequisite: IN102C

AT204C–DRIVEABILITY DIAGNOSTICS
5.0 Credits

This course is designed to provide the student with knowledge of conventional and computerized engine control systems and scientific engine testing and tune-up. Students will receive detailed instruction on operating principles, testing, replacement and repair of the ignition 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 mechanical and electrical engine and control systems and determine needed action. Students will learn how to use diagnostic scan tools to retrieve engine, body, and other computerized control module trouble codes to determine condition, status, and determine needed action.

Prerequisite: IN102C, AT102C, AT103C

AT207C–AUTOMATIC TRANSMISSIONS
4.0 Credits

This course has been developed to provide 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 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.

Prerequisite: IN102C

AT208C–AIR CONDITIONING AND ELECTRICAL ACCESSORIES
4.0 Credits

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.

Prerequisite: IN102C

AT209C–ADVANCED AUTOMOTIVE ELECTRONICS
5.0 Credits

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.

Prerequisite: IN102C, AT103C

AT211C–AUTOMOTIVE STEERING AND SUSPENSION SYSTEMS
4.0 Credits

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.

Prerequisite: IN102C

MA201C–SERVICE SHOP PROCEDURES
3.0 Credits

This course is designed to provide the students with exposure to an actual shops environment, procedures, and protocol by applying prominent skills obtained in previous courses. Emphasis is placed on the removal and replacement of both engines and transaxles. Methods of securing future employment and the preparation of resumes are highlighted. 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: IN102C

Culinary Arts & Food Services

CUL120C—LOWER DIVISION CERTIFICATE PROGRAM

DAY/EVENING PROGRAMS

CIP CODE: 12.0500 **SOC CODE: 35-1012**

total instructional hours 1080
total semester credit hours* 39.0
approximate weeks to complete (including holidays and scheduled breaks)—day (approximate) . . . 50
approximate weeks to complete (including holidays and scheduled breaks)—eve (approximate) . . . 75

***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

The Culinary Arts and Food Services program will provide students with a strong foundation on which to build a successful career in the food service industry. Students will be exposed to the core theory and practical application of the culinary arts and food services industry. Students will be exposed to a variety of topics including but not limited to: Classical and Modern food preparation and cooking techniques, food and beverage management, foodservice operations, food science, menu planning and nutrition, international cuisine and culture and baking and pastry techniques.

Upon completion of this program, students will be trained for entry level positions in the culinary and food services industry as Line Cook, Prep Cook, Sous Chef, Chef's Assistant, and Pantry Cook as well as other employment opportunities in the Food Industry.

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

number	course	total credits	prerequisites
CUL140C	**Introduction to Culinary Arts**	**3.5**	
FBM100C	**Food and Beverage Management**	**3.5**	
IBP140C	**Baking and Pastry Techniques**	**3.5**	
CUL240C	**Foodservice Operations**	**3.5**	
CUL165C	**Advanced Skills I – Meats, Seafood and Poultry**	**3.5**	
CUL175C	**Advanced Skills II – Meats, Seafood and Poultry**	**3.5**	**CUL165C**
CUL155C	**Principles of Food Science**	**3.5**	
NTR101C	**Menu Planning and Nutrition**	**3.5**	
PER101C	**Personal/Private Chef**	**3.5**	**CUL140C, CUL165C, CUL175C**
CUL195C	**International Cuisine and Culture**	**3.5**	
CUL280C	**Externship**	**4.0**	**Students must complete all course work prior to taking externship.**
	TOTALS	**39.0**	

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.

Externship course is six weeks with a minimum of 180 hours of training at an approved externship site, working under the direction of a Chef and/or Manager, following all internal rules and regulations. Most externship assignments are scheduled during daytime hours for both day and evening programs. All weeks exclude holidays, course change days and make-up hours for absences during externship. Actual times are set by the externship sites. Students are responsible for transportation to and from the extern site, as well as meals.

Maximum Time Frame (MTF) . . . . 58.5 semester credits

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.

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CUL140C – INTRODUCTION TO CULINARY
3.5 Credits

This course provides students with an introduction to the fundamentals needed to build a successful culinary career. It starts with an introduction to culinary history, an orientation to the professional kitchen and an overview of the career opportunities available in the foodservice industry. Students participate in culinary product identification and taste exploration, equipment identification, standard measurement, and a thorough examination of knife safety and basic knife skills. The theory and practice of proper foodservice sanitation is studied and leads

to national certification upon successful completion of the examination. Nutrition plays an important role and this course also provides students with the knowledge of the role of nutrition science in various segments of the food service industry. Students learn how to apply healthy and nutritious food selection and preparation to classical and modern cuisine. The path to professional and personal development starts here with the commitment to the highest standards of attitude, attendance, dress, respect and lifelong learning.

Prerequisite(s): None

FBM100C – FOOD AND BEVERAGE MANAGEMENT
3.5 Credits

This course teaches the use of restaurant control systems in menu development, accounting principles, staff training, table service and wine technology. Students learn to create and design menus. Students will explore accounting principles with foodservice industry comparisons. Basic computer literacy and restaurant-related computer applications are introduced. Students study the management process, effective communication skills, the supervisor's role in decision-making and problem solving, effective use of delegation, conflict resolution, motivational techniques, and stress management. Organizational design, line and staff relationships and employee training programs are also presented in this course. Knowledge and techniques of table service are explored, guest check control, federal, state and local control laws and third party liability. Beverage technology studied includes distinguishing wines by grape, variety, growing region, production process and proper service.

Prerequisite(s): None

IBP140C – BAKING AND PASTRY TECHNIQUES
3.5 Credits

This course explores the world of baking and pastry making through the eyes and needs of the culinary student. The baking skill, knowledge, experience and perspective gained through this course leads to the development of better overall chefs, managers and business owners. Each aspect of the baking spectrum is examined through its function of ingredients, mixing methods and finishing techniques. Basic bread baking principles explain how a simple formula of water, yeast, salt and flour is transformed into bread with irresistible taste, texture and fragrance. Danish pastries, pies and cakes are prepared, presented, tasted and critiqued. Restaurant-style desserts are prepared in both classical and modern styles. On-going professional and personal development is continued through the exposure to, and examination of, professional baker and pastry chef organizations, and dessert menu development.

Prerequisite(s): None

CUL240C – FOODSERVICE OPERATIONS
3.5 Credits

This course serves as an introduction to the real world of foodservice operations in which students make use of the skills that they have acquired. Making use of the classic brigade system, individuals will have the opportunity to prep and work all stations both in the kitchen and dining room. Stations will include, but are not limited to Sous Chef, Maître d', Saucier, Garde Manger, Server, Back Waiter, Grillardin. This course will expand upon the creation of menus in regards to seasonality and demographics, all the while, monitoring food & beverage costs and labor cost. The exploration of different types of menus will be a focal point of this course. From the creation of cohesive menus, to proper applications of the products available, to the execution of individual's job description, the future foodservice professional will be a great fit in the modern kitchen. Adherence to proper safety and sanitation requirements will also be strictly monitored. This class will take all knowledge, skills, and techniques that have been taught, and apply it in such a way to link the training to the externship section and finally to the long successful careers ahead.

Prerequisite(s): None

CUL165C – ADVANCED SKILLS I – MEAT, SEAFOOD, AND POULTRY
3.5 Credits

Advanced Skills: Meats, Seafood and Poultry, is a foundation course for the culinary student, emphasizing the classic cooking methods, culinary terminology, identification, fabrication and preparation of seafood, meats, and poultry products. Preparation of sauces and soups will be explored; with the introduction and refinement of the thickening methods and techniques used therein. Consideration will be given to understanding the basics of flavors and flavorings and the factors affecting the perception of flavors, with emphasis on serving correctly seasoned foods. Included will be the proper use and care of culinary tools, practical use of culinary math and purchasing practices and procedures. Modern and classical methods are explored in the preparation of pates, galantines, mousses, canapés and hors d'oeuvre. Artistry and innovation merge in the creation of fruit and vegetable garnishes and melon sculptures. Charcuterie specialties such as sausage making, meat smoking and fish curing are all part of this course.

Prerequisite(s): None

CUL175C – ADVANCED SKILLS II – MEATS, SEAFOOD, AND POULTRY
3.5 Credits

This is a continuation of CUL165C. Advanced Skills: Meats, Seafood and Poultry, is an advanced course for the culinary student, emphasizing the classic cooking methods, culinary terminology, identification, fabrication and preparation of seafood, meats, and poultry products. Preparation of sauces and soups will be explored; with the introduction and refinement of the thickening methods and techniques used therein. Consideration will be given to understanding the basics of flavors and flavorings and the factors affecting the perception of flavors, with emphasis on serving correctly seasoned foods. Included will be the proper use and care of culinary tools, practical use of culinary math and purchasing practices and procedures. Charcuterie specialties such as sausage making, meat smoking and fish curing are all part of this course. Techniques are explored through explanation, demonstrations and comparison tasting. By the end of this course the student should have the necessary skills and knowledge to plan, prepare and present a variety of cold specialties, hot foods and hybrid hot-cold preparation of foods.

Prerequisite(s): CUL165C

CUL155C – PRINCIPLES OF FOOD SCIENCE
3.5 Credits

This course allows students to learn the basics of heat transfer and the affects that heat has on various foods. The techniques for the making of quality stocks will be covered with emphasis on accurate knife cuts to ensure desired results. Students will practice a full range of cooking techniques, including dry-heat, moist-heat and combination methods as applied to vegetables, starches, sandwiches, eggs and breakfast batter products. The making of salads and dressings will be covered as well as a focus on the specifications for purchasing, receiving and storing of common ingredients. Standard weights and measures will be emphasized in all procedures so that once the fundamental techniques have been learned; it is relatively easy to apply those techniques to a full repertoire of other recipes.

Prerequisite(s): None

NTR101C – MENU PLANNING AND NUTRITION
3.5 Credits

This course offers a comprehensive review of foods, nutrients and nutrition. Major nutrient classes: carbohydrates, fats, protein, vitamins, minerals and water will be investigated. The relationship of foods and nutrients to areas of current interest including diet and disease (diabetes, high blood pressure, heart disease and cancer, etc.), weight control, diet and exercise, dietary from pregnancy through older adulthood will be discussed, as well as, gluten free diets. Current dietary recommendations including the Food Guide Pyramid, U.S. Dietary Guidelines and Recommended Dietary Allowances (RDA) will be compared and contrasted.

Prerequisite(s): None

PER101C – PERSONAL/PRIVATE CHEF
3.5 Credits

Personal/Private Chef examines the intrinsic details to being a personal or private chef. The course allows students the opportunity to create a personal business strategy, including marketing, menu design, liability, forms of ownership, financing, and customer service with an emphasis on a step-by-step understanding of how students can begin their own personal chef business.

Prerequisite(s): CUL140C, CUL165C, CUL175C

CUL195C – INTERNATIONAL CUISINE AND CULTURE
3.5 Credits

Students in this course will learn to prepare, taste, serve, and evaluate traditional, regional dishes of important regions and cultures of the world. Emphasis will be placed on ingredients, flavor profiles, preparations, and techniques representative of the cuisines of the Far East, Middle East, Mediterranean, Europe, Africa, North America, and South America.

Prerequisite(s): None

CUL280C – EXTERNSHIP
4.0 Credits

For students, especially those with little previous experience, an experiential learning opportunity offers many benefits. This initial externship intends to broaden the scope of the "new" chef experience not commonly encountered in a student's resident portion of their education or previous workplace environment. The focus is on training the student in culinary skills through greater insight into an actual work environment, developing sensitivity to professional responsibility and promoting student self-learning. Students typically receive an hourly wage. They perform a variety of challenging tasks in and out of the kitchen, under the guidance of a supervising chef/manager at an approved externship location.

Prerequisite(s): Students must complete all course work prior to taking externship.

Electrical and Electronic Systems Technology

EEST410C–LOWER DIVISION CERTIFICATE PROGRAM

DAY AND EVENING PROGRAMS

total semester credit hours* . . 42.0
total instructional hours . . . 1080
approximate weeks to complete (day) . . . . . 47 (including holidays and scheduled breaks)
approximate weeks to complete (eve) . . . . . 74 (including holidays and scheduled breaks)

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

CIP CODE: 46.0302 **SOC CODE: 47-2111**

program objective

This program is designed to provide the essential skills and knowledge for the installation, troubleshooting, repair, and maintenance of commercial and residential entertainment, security, monitoring, and telecommunications systems. Students learn to install cable support structures; laying out and preparing pathways for wiring and cables; installing, securing, testing, and termination of wiring and cables both copper and fiber optic; program digital components and access controls to perform their designated tasks; install and set up media management systems; and perform system commissioning and user training of audio, video, and data systems. The program also prepares students on the essential skills and knowledge needed for entry-level residential electrician work. Students will train on the installation, service and maintenance areas of the residential electrical industry.

Upon completion of this program, graduates can meet the minimum requirements needed to be qualified as an entry-level technician in the residential and/or commercial telecommunications, fire alarm, intrusion detection, signaling, entertainment, audio/video/data, and energy management systems. Student can also qualify as entry-level residential electrician's apprentice.

For Master electrician exam, the applicant shall not show less than seven (7) years of experience preceding the date of the application, under the direction and supervision of a master electrician, three (3) years during which the applicant supervised or was actively in charge of electrical installation work. The Board may credit not more than three (3) years for formal course study or professional training in electrical installation, where applicable. Students will be required to complete out-of-class assignment in each course.

program course list

number	course	total credits	prerequisites
EEST101	**Introduction to the Trades**	**3.5**	
EEST102	**Material Applications**	**3.5**	
EEST103	**Electronic and Electrical Principles**	**3.5**	
EEST104	**Basic Electricity**	**3.5**	
EEST105	**Electrical Wiring Principles**	**3.5**	**EEST103, EEST104**
EEST206	**Electrical Controls**	**3.5**	**EEST103, EEST104, EEST105**
EEST207	**Computers and Networking**	**3.5**	
EEST208	**Fiber Optics, Telecommunication Systems & PLC**	**3.5**	**EEST101, EEST103**
EEST209	**Security Systems, Access Control & CCTV Systems**	**3.5**	**EEST101, EEST102, EEST103, EEST104, EEST105**
EEST210	**Fire Alarm Systems**	**3.5**	**EEST101, EEST102, EEST103, EEST104, EEST105**
EEST211	**A/V, Home Theater and Satellite/Cable TV**	**3.5**	**EEST101, EEST102, EEST103, EEST104, EEST105**
EEST212	**System Integration**	**3.5**	**EEST101, EEST102, EEST103, EEST104, EEST208, EEST209, EES211**
	TOTALS	**42.0**	

Note: Course numbers are for reference only. The sequence of course offerings may vary depending upon scheduling needs. Contact the School's Academic Dean for details. Course hours include a rest period (break) each session. Maximum Time Frame (MTF) = 63.0 Semester Credits.

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.

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EEST101–INTRODUCTION TO THE TRADES
3.5 Credits

The student will be taught how to use basic information for electrical and electronic industries as well as some basic concepts used in performing the electrical and low voltage technician's skill-sets. Material covered includes basic safety, mathematical principles focused on whole numbers, fractions, measurement, decimals, percentages, and the metric system. Additionally, students will be taught how to use hand tools and power tools most commonly used the trades, i.e.: screwdrivers, tape measures, hand saws, drills, etc.

Prerequisite: None

EEST102–MATERIAL APPLICATIONS
3.5 Credits

The student will learn how to use knowledge of basic structural concepts of residential and commercial buildings, including wood and metal frame, brick and block, poured and prefabricated concrete, and structural steel and apply that to residential electrical and electronic system environments. Additionally, this course covers drills and bit types, and techniques used to drill through various construction materials. Discussion of fire and sound-rated walls, and suspended ceilings is also included. The student will learn how to use basic blueprint concepts, and the hardware and systems used by an electrical and electronics technician to mount and support boxes, receptacles, and other low voltage components. The student will learn how to use the various types of anchors and supports, their applications, and how to install them safely. Additionally, an overview of electrical raceways from source to destination provided. The student will learn how to use conduit types and bending techniques which completes the student's training in this course.

Prerequisite: None

EEST103–ELECTRONIC AND ELECTRICAL PRINCIPLES
3.5 Credits

This course provides the student with a general introduction to the concepts used in Ohm's Law applied to DC series, parallel and combined circuits. This course also provides an introduction to concepts used in AC circuits. Topics include electrical theory, electromotive force, resistance, capacitance, inductance, impedance and power equations. Students will study Semiconductors and Integrated circuit theory with hands on lab time to reinforce the learning. Students will study schematic symbols and practice building circuits from schematic diagrams. Students also study appropriate application of proper diagnostic and maintenance procedures using electrical and electronic test equipment to include: meters, oscilloscopes, meg-ohm-meter, watt meters, frequency meters/generators, time domain reflectometers, continuity testers, recording instruments, and RF analyzers.

Prerequisite: None

EEST104–BASIC ELECTRICITY
3.5 Credits

This course introduces the student to the electrical trade and provides them with knowledge in the areas of Electrical safety and residential electrical services. It also introduces them to the National Electrical Code and how to find the applicable codes and requirements in the electrical trade. It further provides the student with knowledge in the areas of grounding and bonding of electrical systems; NEC regulations pertaining to grounding and bonding; equipment and devices used for grounding and bonding. Students will also learn about other types of equipment and devices used in the electrical and electronic trades.

Prerequisite: None

EEST105–ELECTRICAL WIRING PRINCIPLES
3.5 Credits

This course will provide the student with a thorough understanding of components used in the electrical and electronic trades. Student will understand the functions of the various components of a motor control center and viewed from both a maintenance and troubleshooting standpoint. In addition, the electrical student will learn about different types of lamps, lighting fixtures, and related components. Students will also focus on basic guidelines and procedural information for receiving and storing, handling and installing lamps and lighting fixtures. The student will learn about (NEMA) National Electrical Manufacturers Association as they prepare to work with magnetic coils and relays, contacts and holding circuit interlock and other structural features of solenoids, timers, starters and contactors. Students will also learn about fuses and circuit breakers for they provide protection to electrical conductors and equipment against abnormal conditions.

Prerequisite: EEST103, EEST104

EEST206–ELECTRICAL CONTROLS
3.5 Credits

This course will provide the student with a thorough understanding and functions of the various components used in motor control systems. The student will be introduced to the maintenance and troubleshooting functions of motor controls systems. The student will also learn about the different types of devices and components used within motors controls systems. The course will also focus on basic guidelines and procedural information for receiving and storing, handling and installing lamps and lighting fixtures. The student will learn about (NEMA) National Electrical Manufacturers Association as they prepare to work with magnetic coils and relays, contacts and holding circuit interlock and other structural features of solenoids, timers, starters and contactors. The student will also learn about fuses and circuit breakers. They will understand how they provide protection to electrical conductors and equipment against abnormal conditions.

Prerequisites: EEST103, EEST104, EEST105

EEST207–COMPUTERS AND NETWORKING
3.5 Credits

In this course, emphasis is placed on identifying and troubleshooting hardware and software components of the PC. Through hands-on projects that simulate real-life scenarios, students will apply concepts taught. Students will study computer applications in the low voltage industries. Application software installation and configuration will be presented during the course of study. Installation and configuration of specialized hardware components is part of the studies. In addition, the student will be able to network several computers together back to a main computer.

Prerequisites: None

EEST208–FIBER OPTICS, TELECOMMUNICATION SYSTEMS AND PLC
3.5 Credits

This course provides the student knowledge of the basic operation of telephone systems, types of system cables, cable color coding, cable connectors, and installation techniques in addition to identifying the types of data networks, test equipment, and procedures used in testing cables. The student will be familiar with Programmable Logic Controllers and programming them by uses of logic ladders. The student will use the proper procedure and technique to install fiber-optic cabling and support equipment, while describing or demonstrating the types of fiber-optic splicing and/or terminations to achieve an acceptable and "test verified" loss within a specified and acceptable range.

Prerequisites: EEST101, EEST103

EEST209–SECURITY SYSTEMS, ACCESS CONTROL AND CCTV SYSTEMS
3.5 Credits

This course is designed to provide the student with the knowledge and skills to install and troubleshoot signaling systems, entry/access control systems, intrusion detection, security, and surveillance systems (included is CCTV system and key components of a CCTV system), Lighting, HVAC, Water, and Access systems. Students will learn the function and how to install and troubleshoot systems in the areas of access control, security systems and intrusion detection, video surveillance, as well as lighting, HVAC, and water control systems.

Prerequisites: EEST101, EEST102, EEST103, EEST104, EEST105

EEST210–FIRE ALARM SYSTEMS
3.5 Credits

This course provides the student with the knowledge and skills required to successfully, plan, install and problem-solve, both standard Fire Alarm systems and Programmable Fire Alarm systems. Students will be taught the proper methods and equipment to use in residential and industrial fire-detection applications. Proper wiring/cable selection, fire-detection equipment selection, and system layout/planning will be obtained in this course of study. Programming of Fire Alarm devices and systems will be introduced. Theory of typical Fire Alarm software will be presented in this course of study. Hands-on practices of the software applications are included in the course of study.

Prerequisites: EEST101, EEST102, EEST103, EEST104, EEST105

EEST211–A/V HOME THEATRE AND SATELILITE/CABLE
3.5 Credits

This course is designed to provide the student with the knowledge and skills required to install and troubleshoot rack systems, system integration, and residential systems integration. The students will be taught component function and how to install complete systems racks, residential automation systems. The students will be taught system commissioning and how to train client based systems. In addition, they will learn finish phase testing along with maintenance and repair.

Prerequisites: EEST101, EEST102, EEST103, EEST104, EEST105

EEST212–SYSTEM INTEGRATION
3.5 Credits

This course is designed to prepare the student to take the ESPA Exam as well as provide the student with the knowledge and skills required to install and troubleshoot integrated systems. The students will be taught component function and how the skills and technologies learned in previous modules can be integrated together and automated.

Prerequisites: EEST101, EEST102, EEST103, EEST104, EEST208, EEST209, EEST211

Electrical and Electronic Systems Technology Service Management

EEST410A—ASSOCIATE OF APPLIED SCIENCE DEGREE PROGRAM

DAY AND EVENING PROGRAMS

total semester credit hours. . . . 63.0*
total instructional hours 1395
approximate weeks to complete (day/eve) . . . 92 (includes holidays and scheduled breaks)

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

CIP CODE: 46.0302 **SOC CODE: 47-2111**

program objective

This program is designed to provide the essential skills and knowledge for the installation, troubleshooting, repair, and maintenance of commercial and residential entertainment, security, monitoring, and telecommunications systems. Students learn to install cable support structures; laying out and preparing pathways for wiring and cables; installing, securing, testing, and termination of wiring and cables both copper and fiber optic; program digital components and access controls to perform their designated tasks; install and set up media management systems; and perform system commissioning and user training of audio, video, and data systems. The program also prepares students on the essential skills and knowledge needed for entry-level residential electrician work. Students will train on the installation, service and maintenance areas of the residential electrical industry.

Upon completion of this program, graduates can meet the minimum requirements needed to be qualified as an entry-level technician in the residential and/or commercial telecommunications, fire alarm, intrusion detection, signaling, entertainment, audio/video/data, and energy management systems. Student can also qualify as entry-level residential electrician's apprentice.

For Master electrician exam, the applicant shall not show less than seven (7) years of experience preceding the date of the application, under the direction and supervision of a master electrician, three (3) years during which the applicant supervised or was actively in charge of electrical installation work. The Board may credit not more than three (3) years for formal course study or professional training in electrical installation, where applicable. Students will be required to complete out-of-class assignment in each course.

program course list

number	course	total credits	prerequisites
CORE COURSES			
EEST101	Introduction to the Trades	3.5	
EEST102	Material Applications	3.5	
EEST103	Electronic and Electrical Principles	3.5	
EEST104	Basic Electricity	3.5	
EEST105	Electrical Wiring Principles	3.5	EEST103, EEST104
EEST206	Electrical Controls	3.5	EEST103, EEST104, EEST105
EEST207	Computers and Networking	3.5	EEST101, EEST103
EEST208	Fiber Optics, Telecommunication Systems & PLC	3.5	
EEST209	Security Systems, Access Control & CCTV Systems	3.5	EEST101, EEST102, EEST103, EEST104, EEST105
EEST210	Fire Alarm Systems	3.5	EEST101, EEST102, EEST103, EEST104, EEST105
EEST211	A/V, Home Theater and Satellite/Cable TV	3.5	EEST101, EEST102, EEST103, EEST104, EEST105
EEST212	System Integration	3.5	EEST101, EEST102, EEST103, EEST104, EEST208, EEST209, EEST211
	TOTAL CORE COURSE CREDITS	42.0	
GENERAL EDUCATION COURSES			
GEN190	English Composition I	3.0	Placement score above minimum level or GEN099.
GEN180	College Algebra	3.0	Placement score above minimum level or GEN089.
GEN160	Psychology	3.0	
GEN130	Introduction to Critical Thinking	3.0	
GEN292	Speech Communications	3.0	
GEN162	American Government	3.0	
GEN150	Environmental Science	3.0	
	TOTAL GENERAL EDUCATION COURSE CREDITS	21.0	
	TOTAL PROGRAM CREDITS	63.0	
DEVELOPMENTAL COURSES			
GEN099	Foundations of English	0.0	
GEN089	Basic Mathematics	0.0	

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. Maximum Time Frame (MTF) = 94.5 Semester Credits.

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.

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EEST101–INTRODUCTION TO THE TRADES

3.5 Credits

The student will be taught how to use basic information for electrical and electronic industries as well as some basic concepts used in performing the electrical and low voltage technician's skill-sets. Material covered includes basic safety, mathematical principles focused on whole numbers, fractions, measurement, decimals, percentages, and the metric system. Additionally, students will be taught how to use hand tools and power tools most commonly used the trades, i.e.: screwdrivers, tape measures, hand saws, drills, etc.

Prerequisites: None

EEST102–MATERIAL APPLICATIONS

3.5 Credits

The student will learn how to use knowledge of basic structural concepts of residential and commercial buildings, including wood and metal frame, brick and block, poured and prefabricated concrete, and structural steel and apply that to residential electrical and electronic system environments. Additionally, this course covers drills and bit types, and techniques used to drill through various construction materials. Discussion of fire and sound-rated walls, and suspended ceilings is also included. The student will learn how to use basic blueprint concepts, and the hardware and systems used by an electrical and electronics technician to mount and support boxes, receptacles, and other low voltage components. The student will learn how to use the various types of anchors and supports, their applications, and how to install them safely. Additionally, an overview of electrical raceways from source to destination provided. The student will learn how to use conduit types and bending techniques which completes the student's training in this course.

Prerequisites: None

EEST103–ELECTRONIC AND ELECTRICAL PRINCIPLES

3.5 Credits

This course provides the student with a general introduction to the concepts used in Ohm's Law applied to DC series, parallel and combined circuits. This course also provides an introduction to concepts used in AC circuits. Topics include electrical theory, electromotive force, resistance, capacitance, inductance, impedance and power equations. Students will study Semiconductors and Integrated circuit theory with hands on lab time to reinforce the learning. Students will study schematic symbols and practice building circuits from schematic diagrams. Students also study appropriate application of proper diagnostic and maintenance procedures using electrical and electronic test equipment to include: meters, oscilloscopes, meg-ohm-meter, watt meters, frequency meters/generators, time domain reflectometers, continuity testers, recording instruments, and RF analyzers.

Prerequisites: None

EEST104–BASIC ELECTRICITY

3.5 Credits

This course introduces the student to the electrical trade and provides them with knowledge in the areas of Electrical safety and residential electrical services. It also introduces them to the National Electrical Code and how to find the applicable codes and requirements in the electrical trade. It further provides the student with knowledge in the areas of grounding and bonding of electrical systems; NEC regulations pertaining to grounding and bonding; equipment and devices used for grounding and bonding. Students will also learn about other types of equipment and devices used in the electrical and electronic trades.

Prerequisite: None

EEST105–ELECTRICAL WIRING PRINCIPLES

3.5 Credits

This course will provide the student with a thorough understanding of components used in the electrical and electronic trades. Student will understand the functions of the various components of a motor control center and viewed from both a maintenance and troubleshooting standpoint. In addition, the electrical student will learn about different types of lamps, lighting fixtures, and related components. Students will also focus on basic guidelines and procedural information for receiving and storing, handling and installing lamps and lighting fixtures. The student will learn about (NEMA) National Electrical Manufacturers Association as they prepare to work with magnetic coils and relays, contacts and holding circuit interlock and other structural features of solenoids, timers, starters and contactors. Students will also learn about fuses and circuit breakers for they provide protection to electrical conductors and equipment against abnormal conditions.

Prerequisites: EEST103, EEST104

EEST206–ELECTRICAL CONTROLS

3.5 Credits

This course will provide the student with a thorough understanding and functions of the various components used in motor control systems. The student will be introduced to the maintenance and troubleshooting functions of motor controls systems. The student will also learn about the different types of devices and components used within motors controls systems. The course will also focus on basic guidelines and procedural information for receiving and storing, handling and installing lamps and lighting fixtures. The student will learn about (NEMA) National Electrical Manufacturers Association as they prepare to work with magnetic coils and relays, contacts and holding circuit interlock and other structural features of solenoids, timers, starters and contactors. The student will also learn about fuses and circuit breakers. They will understand how they provide protection to electrical conductors and equipment against abnormal conditions.

Prerequisites: EEST103, EEST104, EEST105

EEST207–COMPUTERS AND NETWORKING

3.5 Credits

In this course, emphasis is placed on identifying and troubleshooting hardware and software components of the PC. Through hands-on projects that simulate real-life scenarios, students will apply concepts taught. Students will study computer applications in the low voltage industries. Application software installation and configuration will be presented during the course of study. Installation and configuration of specialized hardware components is part of the studies. In addition, the student will be able to network several computers together back to a main computer .

Prerequisites: None

EEST208–FIBER OPTICS, TELECOMMUNICATION SYSTEMS AND PLC

3.5 Credits

This course provides the student knowledge of the basic operation of telephone systems, types of system cables, cable color coding, cable connectors, and installation techniques in addition to identifying the types of data networks, test equipment, and procedures used in testing cables. The student will be familiar with Programmable Logic Controllers and programming them by uses of logic ladders. The student will use the proper procedure and technique to install fiber-optic cabling and support equipment, while describing or demonstrating the types of fiber-optic splicing and/or terminations to achieve an acceptable and "test verified" loss within a specified and acceptable range.

Prerequisites: EEST101, EEST103

EEST209–SECURITY SYSTEMS, ACCESS CONTROL AND CCTV SYSTEMS

3.5 Credits

This course is designed to provide the student with the knowledge and skills to install and troubleshoot signaling systems, entry/access control systems, intrusion detection, security, and surveillance systems (included is CCTV system and key components of a CCTV system), Lighting, HVAC, Water, and Access systems. Students will learn the function and how to install and troubleshoot systems in the areas of access control, security systems and intrusion detection, video surveillance, as well as lighting, HVAC, and water control systems.

Prerequisites: EEST101, EEST102, EEST103, EEST104, EEST105

EEST210–FIRE ALARM SYSTEMS

3.5 Credits

This course provides the student with the knowledge and skills required to successfully, plan, install and problem-solve, both standard Fire Alarm systems and Programmable Fire Alarm systems. Students will be taught the proper methods and equipment to use in residential and industrial fire-detection applications. Proper wiring/cable selection, fire-detection equipment selection, and system layout/planning will be obtained in this course of study. Programming of Fire Alarm devices and systems will be introduced. Theory of typical Fire Alarm software will be presented in this course of study. Hands-on practices of the software applications are included in the course of study.

Prerequisites: EEST101, EEST102, EEST103, EEST104, EEST105

EEST211–A/V HOME THEATRE AND SATELILITE/CABLE TV

3.5 Credits

This course is designed to provide the student with the knowledge and skills required to install and troubleshoot rack systems, system integration, and residential systems integration. The students will be taught component function and how to install complete systems racks, residential automation systems. The students will be taught system commissioning and how to train client based systems. In addition, they will learn finish phase testing along with maintenance and repair.

Prerequisites: EEST101, EEST102, EEST103, EEST104, EEST105

EEST212–SYSTEM INTEGRATION

3.5 Credits

This course is designed to prepare the student to take the ESPA Exam as well as provide the student with the knowledge and skills required to install and troubleshoot integrated systems. The students will be taught component function and how the skills and technologies learned in previous modules can be integrated together and automated.

Prerequisites: EEST101, EEST102, EEST103, EEST104, EEST208, EEST209, EEST211

GEN130–INTRODUCTION TO CRITICAL THINKING

3.0 Credits

This course presents students with techniques to develop their critical thinking skills. Topics include the six sequential steps of critical thinking, the importance of language, ambiguity, structure of arguments and creative problem solving. Upon successful completion of this course students should be able to demonstrate an improvement in their ability to apply critical thinking skills to real world situations.

Prerequisites: None

GEN150–ENVIRONMENTAL SCIENCE

3.0 Credits

This course is designed to provide students with a basic scientific overview of how nature works and how things in nature are interconnected. This course explores the study of the earth's natural resources. Topics include the study of how air, water, soil, natural energy, and the minerals are critical and related parts of the earth's interconnected systems.

Prerequisites: None

GEN160–PSYCHOLOGY

3.0 Credits

This course introduces human behavior. It includes the study of the theories and concepts of psychology including the scope of psychology, biological foundations and the brain, sensation, perception, motivation, personality, learning/memory, emotion, states of consciousness, personality theories, cognition, life-span development, and applied psychology.

Prerequisites: None

GEN162–AMERICAN GOVERNMENT

3.0 Credits

This course is designed to be an exploration of how American government formed in its constitutional roots and how it continues to develop. Topics will include how government is organized, its influencing factors, and the development of public policy.

Prerequisites: None

GEN180–COLLEGE ALGEBRA

3.0 Credits

This course focuses on algebraic concepts essential for success in the workplace and other courses. Using real world examples and applications, students practice fundamental operations with number systems, formulas, algebraic expressions and liner equations. This course also explores problems involving factoring, inequalities, exponents, radicals, linear equations, functions, quadratic equations and graphs. Skills for success in mathematics will be emphasized.

Prerequisite: Placement score above minimum level or GEN089.

GEN190–ENGLISH COMPOSITION I

3.0 Credits

Students develop written communication skills, with emphasis placed on the principles of effective communication which includes understanding the writing process, analysis of readings, as can be applied personally and professionally.

Prerequisite: Placement score above minimum level or GEN099.

GEN292–SPEECH COMMUNICATION

3.0 Credits

This course will enhance the student's understanding and appreciation of the uses of oral and written communication and will teach the skills needed to write and speak effectively in a variety of situations.

Prerequisites: None

DEVELOPMENTAL COURSES

Students enrolled in the Associates Degree programs will be required to either;

Provide documentation verifying a combined SAT score of 1350 or higher, or ACT score of 17 or higher in both Math and English. OR Take the placement test measuring both Math and English proficiency and attain a passing score. Testers not receiving a passing score will be required to take a development course in English, Math or both. Those students required to take Developmental Courses in either Math or English must successfully complete the Developmental course before taking the subsequent math or English college level course. The Developmental course will be graded as either PD (Pass Developmental) or NPD (Not Passed Developmental) and shall not enter into the GPA calculation and will not be applied toward graduation requirements.

GEN089–BASIC MATHEMATICS

0.0 Credits

This course focuses on concepts and applications of arithmetic, including whole numbers, fractions, ratios, proportions, the decimal system, and percents. Brief introductions to algebra, formulas, algebraic expressions, and linear equations are also included. Special emphasis is placed on the application of basic math skills to common workplace problems and real-life situations.

Prerequisites: None

GEN099–FOUNDATIONS OF ENGLISH

0.0 Credits

This course is designed to give students guided practice in the fundamental skills they will need to complete college-level reading and writing assignments. Mastery and review of Basic English concepts, essential to successful college and work experience, will be emphasized throughout the course. Students will apply their learning to a variety of writing activities that emphasize the development of paragraphs and essays.

Prerequisites: None

International Baking and Pastry

IBP101C–LOWER DIVISION CERTIFICATE PROGRAM

DAY/EVENING PROGRAMS

CIP CODE: 12.0501 **SOC CODE: 51-3011**

total instructional hours 1080
total semester credit hours* 37.5
approximate weeks to complete–day . . . . . 50 (including holidays and scheduled breaks)
approximate weeks to complete–eve . . . . . 74 (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

The program's objective is to develop graduates who are "Industry Ready"; confident, competent and with a sense of urgency. Graduates are prepared to enter the foodservice industry in a variety of entry level positions. The program's educational approach to this objective includes the following:

- Provide students with the proper balance of theory and practical application of the baking and pastry arts.
- Provide students with a qualified, meaningful, well managed experiential learning opportunity.
- Provide student with an opportunity to participate in community events and services.

This approach to education not only produces technically skilled students, but also well rounded graduates who are prepared to be professional members of the communities in which they live and work.

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

number	course	total credits	prerequisites
CUL140C	**Introduction to Culinary Arts**	**3.5**	
CUL240C	**Foodservice Operations**	**3.5**	
FBM100C	**Food and Beverage Management**	**3.5**	
IBP150C	**Artisan Breads and Viennoiserie**	**3.5**	
IBP160C	**American and European Pastry and Baked Goods**	**3.5**	
IBP170C	**Contemporary and Classical Cakes**	**3.5**	
IBP140C	**Baking and Pastry Techniques**	**3.5**	
IBP180C	**Techniques and Artistry in Sugar**	**3.5**	
IBP190C	**Techniques and Artistry in Chocolate**	**3.5**	
CUL250C	**Experiential Learning–Externship A**	**2.0**	Students must complete all course work prior to taking externship.*
CUL260C	**Experiential Learning–Externship B**	**2.0**	Students must complete all course work prior to taking externship.*
CUL270C	**Experiential Learning–Externship C**	**2.0**	Students must complete all course work prior to taking externship.*
	TOTALS	**37.5**	

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.

Each externship course is five weeks with a minimum of 90 hours; total Experiential Learning period is 15 weeks with a minimum of 270 hours of training at an approved externship site, working under the direction of a Chef and/or Manager, following all internal rules and regulations. Most externship assignments are scheduled during daytime hours for both day and evening programs. All weeks exclude holidays, course change days and make-up hours for absences during externship. Actual times are set by the externship sites. Students are responsible for transportation to and from the extern site, as well as meals.

Maximum Time Frame (MTF) . . . . 56.0 semester credits

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.

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CUL140C–INTRODUCTION TO CULINARY
3.5 Credits

This course provides students with an introduction to the fundamentals needed to build a successful culinary career. It starts with an introduction to culinary history, an orientation to the professional kitchen and an overview of the career opportunities available in the foodservice industry. Students participate in culinary product identification and taste exploration, equipment identification, standard measurement, and a thorough examination of knife safety and basic knife skills. The theory and practice of proper foodservice sanitation is studied and leads to national certification upon successful completion of the examination. Nutrition plays an important role and this course also provides students with the knowledge of the role of nutrition science in various segments of the food service industry. Students learn how to apply healthy and nutritious food selection and preparation to classical and modern cuisine. The path to professional and personal development starts here with the commitment to the highest standards of attitude, attendance, dress, respect and lifelong learning.
Prerequisite(s): None

CUL240C–FOODSERVICE OPERATIONS
3.5 Credits

This course serves as an introduction to the real world of foodservice operations in which students make use of the skills that they have acquired. Making use of the classic brigade system, individuals will have the opportunity to prep and work all stations both in the kitchen and dining room. Stations will include, but are not limited to Sous Chef, Maître d', Saucier, Garde Manger, Server, Back Waiter, Grillardin. This course will expand upon the creation of menus in regards to seasonality and demographics, all the while, monitoring food & beverage costs and labor cost. The exploration of different types of menus will be a focal point of this course. From the creation of cohesive menus, to proper applications of the products available, to the execution of individual's job description, the future foodservice professional will be a great fit in the modern kitchen. Adherence to proper safety and sanitation requirements will also be strictly monitored. This class will take all knowledge, skills, and techniques that have been taught, and apply it in such a way to link the training to the externship section and finally to the long successful careers ahead.
Prerequisite(s): None

FBM100C–FOOD AND BEVERAGE MANAGEMENT
3.5 Credits

This course teaches the use of restaurant control systems in menu development, accounting principles, staff training, table service and wine technology. Students learn to create and design menus. Students will explore accounting principles with foodservice industry comparisons. Basic computer literacy and restaurant-related computer applications are introduced. Students study the management process, effective communication skills, the supervisor's role in decision-making and problem solving, effective use of delegation, conflict resolution, motivational techniques, and stress management. Organizational design, line and staff relationships and employee training programs are also presented in this course. Knowledge and techniques of table service are explored, guest check control, federal, state and local control laws and third party liability. Beverage technology studied includes distinguishing wines by grape, variety, growing region, production process and proper service.
Prerequisite(s): None

IBP140C–BAKING AND PASTRY TECHNIQUES
3.5 Credits

This course explores the world of baking and pastry making through the eyes and needs of the culinary student. The baking skill, knowledge, experience and perspective gained through this course leads to the development of better overall chefs, managers and business owners. Each aspect of the baking spectrum is examined through its function of ingredients, mixing methods and finishing techniques. Basic bread baking principles explain how a simple formula of water, yeast, salt and flour is transformed into bread with irresistible taste, texture and fragrance. Danish pastries, pies and cakes are prepared, presented, tasted and critiqued. Restaurant-style desserts are prepared in both classical and modern styles. On-going professional and personal development is continued through the exposure to, and examination of, professional baker and pastry chef organizations, and dessert menu development.
Prerequisite(s): None

IBP150C–ARTISAN BREADS AND VIENNOISERIE
3.5 Credits

This course explores the time-honored craft of bread making. The focus is on the world of breads, doughs, and batters from the simplicity of the classical French baguette to the elegance of a flaky croissant. The art and science of baking is explored through extensive ingredient identification and experimentation. Today's educated and quality-minded public has turned its sights to the professional baker to create handcrafted artisan-style breads. Viennoiserie style breakfast pastries such including Danish pastry along with muffins, scones and a variety of croissants are created, critiqued and consumed. Elements of healthy alternatives are discussed and prepared.
Prerequisite(s): None

IBP160C–AMERICAN AND EUROPEAN PASTRY AND BAKED GOODS
3.5 Credits

This course hones student's baking skills and explores the preparation of pate choux, cookies and petit fours sec. Additionally emphasis is placed on the preparation and presentation of a variety of traditional and contemporary tarts, pies, and puff pastry items. Students study the use and function of ingredients, mixing methods and finishing techniques of desserts and baked goods. Elements of healthy alternatives are discussed and prepared.
Prerequisite(s): None

IBP170C–CONTEMPORARY AND CLASSICAL CAKES
3.5 Credits

This course focuses on the study and preparation of contemporary and classical cakes, torts, entremets, and petit gateaux from around the world. As a part of this focus, mousses, creams, and meringues are studied and used as included as fillings and toppings. A variety of classical American and International cake mixing methods is studied to include creaming, sponge and high ratio. A variety of icings and frostings are explored and prepared to fill and ice the baked cakes. Basic cake decoration is practiced in an effort to build skills, speed, and accuracy. Elements of healthy alternatives are discussed and prepared.
Prerequisite(s): None

IBP180C–TECHNIQUES AND ARTISTRY IN SUGAR
3.5 Credits

This course focuses on the many applications of sugar based components as they are used to create stunning decorations and centerpieces. It includes the design and creation of special occasion cakes such as wedding, birthday, and anniversary cakes. These beautiful expressions require a study and practice of advanced decoration, including rolled fondant, gum paste, and marzipan, which is also included in this course. The brilliant and exciting world of sugar art is studied and practiced with the inclusion of pulled sugar, blown sugar, spun sugar, pressed sugar, and pastillage. The various techniques of sugar art are combined to create stunning showpieces.
Prerequisite(s): None

IBP190C–TECHNIQUES AND ARTISTRY IN CHOCOLATE
3.5 Credits

This course enters the wide world of chocolate with an extensive study of this delectable delicacy. Chocolate is used to create everything from flavored truffles and candies to cocoa paintings and elaborate centerpieces Also included this course is a study of the design and execution of contemporary restaurant-style plated desserts and the preparation of a variety of frozen desserts including ice creams, sorbets, and gelatos. Elements of healthy alternatives are discussed and prepared.
Prerequisite(s): None

CUL250C–EXPERIENTIAL LEARNING–EXTERNSHIP A
2.0 Credits

For students, especially those with little previous experience, an experiential learning opportunity offers many benefits. This initial externship intends to broaden the scope of the "new" chef experience not commonly encountered in a student's resident portion of their education or previous workplace environment. The focus is on training the student in culinary skills through greater insight into an actual work environment, developing sensitivity to professional responsibility and promoting student self-learning. Students typically receive an hourly wage. They perform a variety of challenging tasks in and out of the kitchen, under the guidance of a supervising chef/manager at an approved externship location.
Prerequisite(s): Students must complete all course work prior to taking externship. Note: Externships must be taken in sequence.

CUL260C–EXPERIENTIAL LEARNING–EXTERNSHIP B
2.0 Credits

Once the initial externship has been completed, students are ready to move on to intermediate skills. Students should work on mastery of given tasks to achieve a reasonable level of competence so that they may continue to grow as an extern and fit into the team aspects of the establishment. Externs should be accepting and following school and company policies as well as maintaining the highest standards of professionalism and acceptable behavior in the workplace.
Prerequisite(s): Students must complete all course work prior to taking externship. Note: Externships must be taken in sequence.

CUL270C–EXPERIENTIAL LEARNING–EXTERNSHIP C
2.0 Credits

This third segment of the externship experience allows students further opportunities to improve their skills, techniques, and most importantly, their speed, accuracy, and efficiency. It is also an opportunity for students to consider their next career moves. The Lincoln Culinary Institute's Career Services Department welcomes students to return to the school during this phase to freshen up their resumes and cover letters, review the available job postings, and discuss whether they wish to stay on as regular employees at their current site or consider alternate options.
Prerequisite(s): Students must complete all course work prior to taking externship. Note: Externships must be taken in sequence.

Welding and Metal Fabrication Technology

WLD100C—LOWER DIVISION CERTIFICATE PROGRAM

DAY/EVENING PROGRAMS

CIP CODE: 48.0508 **SOC CODE: 51-4121**

day/eve . . . . . .approximately 40 weeks (including holidays and scheduled breaks), 720 instructional hours, 27.5 semester credits*

***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 and Metal Fabrication Technology program prepares students for entry level welder positions as structural 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 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 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.

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

number	course	total credits	prerequisites
WLD111AN	**Welding and Cutting Fundamentals**	**5.0**	
WLD112AN	**Basic Arc Welding Procedures**	**4.5**	**WLD111AN**
WLD113AN	**SMAW – Plate Welding**	**4.5**	**WLD111AN, WLD112AN**
WLD114AN	**GMAW/FCAW (MIG) – Plate Welding**	**4.5**	**WLD111AN, WLD112AN**
WLD115AN	**GTAW (TIG) – Welding Procedures**	**4.5**	**WLD111AN, WLD112AN**
WLD118AN	**GMAW/GTAW – Fabrication Processes**	**4.5**	**WLD111AN, WLD112AN, WLD114AN, WLD115AN**
	TOTALS	**27.5**	

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. Maximum Time Frame (MTF) = 41.0 semester credits.

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.

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WLD111AN–WELDING AND CUTTING FUNDAMENTALS

5.0 Credits

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

WLD112AN–BASIC ARC WELDING PROCEDURES

4.5 Credits

This course is a continuation of WLD111AN 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): WLD111AN

WLD113AN–SMAW - PLATE WELDING

4.5 Credits

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): WLD111AN , WLD112AN

WLD114AN–GMAW/FCAW (MIG) – PLATE WELDING

4.5 Credits

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): WLD111AN, WLD112AN

WLD115AN–GTAW (TIG) –WELDING PROCEDURES

4.5 Credits

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): WLD111AN, WLD112AN

WLD118AN–GMAW/GTAW – FABRICATION PROCESSES

4.5 Credits

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 WLD 114AN and WLD115AN. Sheet metal application may be steel, stainless steel, and/or aluminum.

Prerequisite(s): WLD111AN, WLD112AN, WLD114AN, WLD115AN

Educational Need

This data was compiled from the Maryland Department of Labor Site.
All employment state data can be found on Maryland Occupational Projections - Office of Workforce Information and Performance (OWIP) (state.md.us)
State employment information contains the most current 2018-2028 long-term projections.

Program	**MD DOL: Projected Employment by 2028**	**Maryland Dept of Labor: % change**
Air Conditioning, Refrigeration & Heating Technology	Over 9,200	11%
Automotive Service Management ***Automotive Technology with AUDI Education Partnership*** ***Automotive Technology***	Over 15,000	0%
Culinary Arts and Food Services	More than 25,300	23%
Electrical and Electronic Systems Technology ***Electrical and Electronic Systems Technology Service Management***	Over 18,300	8%
International Baking and Pastry	Over 4,300	15%
Welding and Metal Fabrication Technology	Almost 3,400	7%

Since 1960, Lincoln Tech has been a major destination for students seeking career training for the Automotive and HVAC industries. Throughout the years more programs were added to help meet the employment needs of the Baltimore-Washington area. These programs include Culinary Arts & Food Services, International Baking & Pastry, Welding, and Electrical and Electronic Systems Technology. Maryland projections show more than 74,000 job opportunities throughout the region by 2028.

New programs and modifications to current programs are implemented after detailed discussions and meetings with the school's Program Advisory Committees (PAC) and local employers and partners. The PAC also reviews program outcomes on an annual basis to revalidate the need for the program.

As of November 2020, Lincoln College of Technology was approved by the Maryland Higher Education Commission as both an on-campus and a distance education program in all its program offerings.

State-specific employment projections and projections was compiled from the U.S. Dept. of Labor, Bureau of Labor Statistics, for the years 2018-2028, www.onetonline.org and

Maryland Occupational Projections - Office of Workforce Information and Performance (OWIP) (state.md.us)

Automotive Field

Employment of automotive service technicians and mechanics has over 15,000 projected openings from 2018 to 2028. Typical education for this field is a postsecondary non-degree award. Employers prefer that automotive service technicians and mechanics complete a formal education program at a postsecondary institution. Industry certification is usually required once the person is employed. Both our Lower Level Certificate and Associate Programs prepare our students for 8 ASE certifications.

Air Conditioning, Refrigeration & Heating Technology

Employment of heating, air conditioning, and refrigeration mechanics and installers is projected to grow 11% from 2018-2028, higher than the national average. Candidates familiar with computers and electronics and those with good troubleshooting skills will have the best job opportunities as employers continue to have difficulty finding qualified technicians to install, maintain, and repair complex new systems. The typical education for this field is postsecondary non-degree award and because HVAC systems have become increasingly complex, employers generally prefer applicants with postsecondary education or those who have completed an apprenticeship. Lincoln College of Technology prepares our students for the EPA (Environmental Protection Agency) Certification Testing.

Culinary Arts

Employment of chefs and head cooks as well as First-Line Supervisors of Food Preparation and Serving Workers is projected to grow 23% percent from 2018 to 2028. Job opportunities also will result from the need to replace workers who leave the occupation. Many chefs and head cooks receive training at a community college, technical schools, culinary arts schools, or 4-year colleges.

Electrical and Electronic Systems Technology

To stay current with the electronic field LCT has started offering a newer program version, Electrical and Electronic Systems Technology (EEST). This program has an increased emphasis on the electrical skills as required by low voltage electronics technicians in the residential and construction fields. The majority of workers in this field has post-secondary education and the projected growth rate between 2018-2028 is expected to increase by 8% in Maryland, faster than the average rate.

Welding and Metal Fabrication

Employment in this trade is projected to grow 7% percent from 2018 to 2028, faster than the national average for all occupations. Welders have the ability to find employment in many major industries. The nation's aging infrastructure will require the expertise of welders, cutters, solderers, and brazers to help rebuild bridges, highways, and buildings.

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

Lincoln Technical Institute was established in Washington in 1960 with the goal of offering an exceptional learning opportunity for its students in Automotive and HVAC Technology. It has continuously operated as an established institution and currently coexists with other institutions in providing both degree and certificate-based programs. Throughout the years additional programs were added to help meet the employment and market needs of the Baltimore-Washington area. These fields include Culinary Arts, Baking, Electronic Systems Technology and Welding. These decisions were implemented after continuous detailed discussions with the school's Program Advisory Committees (PAC) and local employers and partners.

A current analysis was done with other similar programs in the state of Maryland, these include: Community College of Baltimore County, Montgomery College, All-State, North American Trade School, Prince George's Community College and Stratford University.

Lincoln College of Technology continues to provide quality career-focused training while helping our students gain the technical and soft skills needed to join and further advance in their chosen career. Our faculty and staff are committed to supporting our students from enrollment and continues beyond graduation. Our commitment in providing outstanding student-centered training has led to decades of qualified graduates entering the workforce, stimulating the economy and becoming professional members of the communities they serve.

Automotive Technology Associate in Applied Science

Similarities:

Lincoln College of Technology	**Community College of Baltimore County**
70 credits	70 credits
Hands-on learning/on the job training	Hands-on learning
Provides entry-level skills and prepares for employment in the repair industry	Prepares for employment in the repair industry
Service Shop Experience	Co-op Experience
Students will be able to complete ASE exams	ASE exams

Differences:

Lincoln College of Technology	**Community College of Baltimore County**
19 months to complete	4 semesters + 2 short sessions duration
Offers one program	Offers two options (Global or Manufacturer- Specific)
General Education credits = 21	General Education credits =18

Automotive Technology Certificate

Similarities:

Lincoln College of Technology	Community College of Baltimore County
Students can transfer to the A.A.S.	Students can transfer to the A.A.S. Global option
Hands-on learning/on the job training	Hands-on learning
Provides entry-level skills and prepares for employment in the repair industry	Prepares for employment in the repair industry
Similar content in the following courses Intro course: Driving You Performance Automotive Brake Systems Electrical Systems Automotive Steering and Suspension Systems Air Conditioning and Electrical Accessories Automatic Transmissions AND Transmissions and Drive Lines	*Similar content in the following courses* Intro to Automotive Technology Repairing Automotive Brake Systems Repairing Automotive Electronics AND Servicing Automotive Electrical and Electronic Systems Repairing Automotive Suspension Systems Servicing Automotive Heating and Air-Conditioning Systems Repairing Automotive Automatic Transmissions AND Repairing Automotive Manual Transmissions

Differences:

Lincoln College of Technology	Community College of Baltimore County
Offers 2 certificate programs: Automotive Technology- 49 credits Automotive Technology with Audi Education Partnership- 59 credits	Offers 7 certificate programs: Automotive Air Conditioning and Heating Specialist Certificate- 23 credits Automotive Brake and Suspension Specialist Certificate – 17 credits Automotive Drive Train Specialist Certificate- 28 credits Automotive Electrical and Electronic Specialist Certificate- 29 credits Automotive Engine Specialist Certificate- 29 credits Automotive Master Technician Certificate- 55 credits Automotive Service Attendant Certificate- 22 credits

Students qualify for the following ASE exams: A-1, A2-, A-3, A-4, A-5, A-6, A-7, A-8, L-1, and G-1	Varied depending on certificate specialization

Automotive Technology, A.A.S.

Similarities:

Lincoln College of Technology	Montgomery College
Program is Associate in Applied Science	Program is Associate in Applied Science
Hands-on learning and lecture components	Courses include lecture and lab(shop) sections
Program outcomes: test, diagnose, replace and repair adjustments/components on automobiles	Program outcomes: Diagnose, service, and repair automotive systems and components
Prepares students for ASE technician certification exams	Prepares students for ASE technician certification exams
ASE-NATEF Master Certified curriculum	ASE-NATEF Master Certified curriculum

Differences:

Lincoln College of Technology	Montgomery College
70 credits	60 credits
19 months to complete	4 semesters (2 years)
A-1, A2-, A-3, A-4, A-5, A-6, A-7, A-8, L-1, and G-1	ASE A-1, A-4, A-5, A-6, A-8, and L-1.

Automotive Technology Certificate Program

Similarities:

Lincoln College of Technology	Montgomery College
Courses taken at certificate level can be applied to A.A.S	Courses taken at certificate level can be applied to A.A.S
Hands-on, on the job training	Hands-on, practical program
Prepares for ASE certifications	Prepares for ASE certification
ASE-NATEF Master Certified curriculum	ASE-NATEF Master Certified curriculum

Differences:

Lincoln College of Technology	Montgomery College
Offers 2 certificate programs: Automotive Technology- 49 credits Automotive Technology with Audi Education Partnership- 59 credits	Offers 4 certificate programs: Automotive Electrical Systems Specialist- 16 credits Engine Performance Specialist- 23 credits Powertrain Specialist- 25 credits Undercar Specialist Certificate- 17 credits
12 months to complete	Depending on certificate chosen: between 1-2 semesters for full-time students
Both certificate options prepare students for A-1, A2-, A-3, A-4, A-5, A-6, A-7, A-8, L-1, and G-1	Automotive Electrical Systems Specialist (ASE: A-6, L-3) Engine Performance Specialist (ASE: A-1, A-8, L-1) Powertrain Specialist- (ASE: A-1, A-2, A-3) Undercar Specialist Certificate (ASE: A-4, A-5)

Air Conditioning, Refrigeration & Heating Technology

Similarities:

Lincoln College of Technology	North American Trade School
40 weeks to complete	40 weeks to complete
Hands-on, on the job training	Hands-on, practical program
Similar courses: Electricity Basic Refrigeration Systems AND Commercial Refrigeration Control Air Conditioning Systems AND Air Conditioning Design and Layout Warm Air Heating	*Similar courses:* Electricity for HVAC Practical HVAC Applications AND Basic Cooling Systems Air Systems/Planned Maintenance Heating Systems/Heat Pumps
Prepares for EPA Certification	Prepares for EPA Certification

Differences:

Lincoln College of Technology	North American Trade School
45 credits/1080 hours	68 credits/1152 hours
Program name: Air Conditioning, Refrigeration, & Heating Technology	Program name: Heating, Refrigeration, Ventilation & Air Conditioning Technology
Incorporates Green Technology components	
Nine courses at five credits each	12 courses between three – seven credits each
Lower Division Certificate Program	Diploma Program

Similarities:

Lincoln College of Technology	All State Career School
Qualified to service, troubleshoot, repair and install HVAC systems.	Qualified for installation, maintenance and repair work in both heating and air conditioning.
Hands-on, on the job training	Hands-on, practical program
Similar content in the following courses Electricity Basic Refrigeration Systems Commercial Refrigeration Control Air Conditioning Systems Air Conditioning Design and Layout Warm Air Heating	*Similar content in the following courses* Fundamental and Electricity Basic Refrigeration & Hermetics Commercial Refrigeration Air Conditioning Heating Systems Heat Pump Systems
Prepares for EPA Certification	Prepares for EPA Certification

Differences:

Lincoln College of Technology	All State Career School
40 weeks to complete/1080 hours	48 weeks to complete/960 hours
45 credit program	50 credit program
Lower Level Certificate Program	Diploma Program
Intro courses include: Introduction to Climate Control Systems Electricity Basic Refrigeration Systems	Introductory courses: Fundamentals and Electricity Basic Refrigeration & Hermetic

Similarities:

Lincoln College of Technology	Community College of Baltimore County
Qualified to service, troubleshoot, repair and install HVAC systems.	Prepares students for a career in heating, ventilating, air condition and energy industry
Graduates are qualified to specialize in more than one specific area of HVAC market	Offers shorter certificates for specialization areas.

Differences:

Lincoln College of Technology	Community College of Baltimore County
Offers one Certificate Program	Offers Associate of Applied Science (A.A.S.) Four certificate options
45 credit program	A.A.S 60 credit program (including general education courses) 13 credits: Advanced HVAC and Energy Technology Certificate 17 credits: Basic HVAC and Energy Technology Certificate 26 credits: Building Automation Systems

Electrical and Electronic Systems Technology

Similarities:

Lincoln College of Technology	North American Trade Schools
Similar content in the following courses Introduction to the Trades Electrical Wiring Principles Basic Electricity- covers NEC regulations Electrical Wiring Principles and Electrical Controls	*Similar content in the following courses* Introduction to Electrical Technology Residential Wiring/Commercial Wiring NEC Concepts Troubleshooting Motors and Machine Control

Differences:

Lincoln College of Technology	North American Trade Schools
Program name: Electrical and Electronic Systems Technology	Program name: Electrical Technology
Two program options: A.A.S and Lower Division Certificate Program	One program offering: Diploma Program
63 credits/1395 hours for A.A.S 42 credits/1080 hours for Lower Div. Certificate	71 credits/1152 hours for Diploma program
Differences in courses Low voltage covered in numerous courses: Introduction, Computer and Networking, Material Applications, A/V Home Theatre and Satellite Cable, Fire Alarms Systems Mathematical principles covered in the Introduction to the Trades course and reinforced in subsequent courses. PLC is covered in Fiber Optics, Telecommunications Systems and PLC Career Readiness is covered in the Intro class and subsequent courses. It is also delivered through the Career Services Team with modules consisting of resume preparation, interviewing skills, networking to name a few.	*Differences in courses* Designated Low Voltage Course Math principles covered in Intro course and also designated Math and Home Automation class. Introduction to Programmable Logic Controllers Career Readiness Course

Culinary Arts & Food Services

Similarities:

Lincoln Culinary Institute	Prince George's Community College
10 didactic courses	10 courses + ServeSav Certification course
Similar content in the following courses 1. Introduction to Culinary Arts 2. Foodservice Operations 3. Advanced Skills I 4. Advanced Skills II 5. Baking and Pastry Techniques 6. International Cuisine and Culture	*Similar content in the following courses* 1. Introduction to Culinary Arts + ServSafe Certification 2. Food Service Operations 3. Food Production I 4. Food Production II 5. Baking Skills AND Advanced Baking and Pastry 6. International Cuisine

Differences:

Lincoln Culinary Institute	**Prince George's Community College**
One Program: Culinary Arts & Food Services	Two programs: Culinary Arts AND Culinary Arts, A.A.S.
Lower Division Certificate Program	Certificate Program and A.A.S.
39 credits	31 credits/60 respectively
Differences in courses 1. Garde Manger incorporated in Foodservice Ops course. 2. Personal/Private Chef – leadership/business strategies covered on how to start your own business. 3. Culinary Externship for 180 hours	*Differences in courses* 1. Designated Garde Manger course 2. Leadership and Interpersonal Dynamics in Hospitality 3. No Culinary Internship for Certificate; 75 hours Culinary Internship for A.A.S program.

Similarities:

Lincoln Culinary Institute	**Stratford University**
Similar content in the following courses 1. Introduction to Culinary Arts 2. Menu and Nutrition Planning 3. Baking and Pastry Techniques 4. Foodservice Operations 5. Advanced Skills I 6. Advanced Skills II 7. Baking and Pastry Techniques 8. International Cuisine and Culture 9. Principles of Food Science	*Similar content in the following courses* 1. Culinary Theory and Sanitation AND Kitchen Fundamentals 2. Nutrition & Menu Planning 3. Fundamentals of Baking AND Pastry Arts 4. Food Service Operations 5. Food Production I 6. Food Production II 7. Baking Skills 8. International Cuisine 9. Food Science

Differences:

Lincoln Culinary Institute	**Stratford University**
Program name: Culinary Arts & Food Services	Program name: Advanced Culinary Arts
Lower Division Certificate Program	A.A.S. Program
Offers 11 courses including externship	Offers 13 core courses including externship 7 courses in Arts & Sciences required
Differences in courses 1. Advanced Skills I and II incorporate sauces, soups, & stocks preparation and exploration. 2. Dining Room service and Garde Manger are integrated in the Foodservice Operations course 3. Computer literacy and applications introduced in the Food and Beverage Management course.	*Differences in courses* 1. Sauces, Soups, & Stocks 2. Dining Room Service AND Garde Manger courses 3. Computer Office Applications

International Baking and Pastry

Similarities:

Lincoln Culinary Institute	**Stratford University**
National Examination	ServeSav Certification course
Similar content in the following courses 1. Baking and Pastry Techniques 2. Artisan Breads and Viennoiserie 3. Contemporary and Classical Cakes 4. Techniques and Artistry in Sugar 5. American and European Pastry and Baked Goods	*Similar content in the following courses* 1. Fundamentals of Baking 2. Artisan Breads 3. Cakes, Custards, and Creams 4. Specialty and Wedding Cakes 5. Confectionary Production

Differences:

Lincoln Culinary Institute	**Stratford University**
Program name: International Baking and Pastry	Baking and Pastry Arts
Lower Division Certificate Program	Associate of Applied Science.
Offering 12 core courses including 3 externships- 12 months to complete for full-time students	Offers 13 core courses including 1 externship And 7 courses in Arts & Sciences required- 16 months to complete for full-time students
Differences in courses 1. Baking and Pastry Techniques AND Techniques and Artistry in Chocolate incorporate plated desserts 2. Culinary Externship offered in 2 courses totaling 270 hours 3. Dining Room operations included in Foodservice Operations course	*Differences in courses* 1. Designated Plated Dessert course 2. 135 hours Culinary Internship 3. Dining Room Service

Welding and Metal Fabrication

Similarities:

Lincoln College of Technology	North American Trade Schools
Welding procedures include: Shielded Metal Arc Welding (SMAW), Gas Metal Arc Welding (GMAW/MIG), Flux Core Arc Welding (FCAW), oxyfuel metal cutting, and Gas Tungsten Arc Gas Welding (GTAW/TIG)	*Welding techniques include:* Oxy-Fuel Cutting, Shielded Metal Arc Welding, Gas Tungsten Arc Welding, Gas Metal Arc Welding, and Flux Cored Arc Welding.

Differences:

Lincoln College of Technology	North American Trade Schools
Program name: Welding and Metal Fabrication	Program name: Combination Welding
Lower Division Certificate Program	Diploma Program
27.5 credits/720 hours	48 credits/864 hours
Differences in courses Program complete in 6 courses 1. GMAW/FCAW (MIG) – Plate Welding 2. SMAW – Plate Welding *Career Readiness is initiated on the onset of the students' education and re-enforced throughout the course modules. Students gain access and learn about Career Edge where Career Services Team members provide and teach multiple workshops/online modules throughout the students' life cycle.	*Differences in courses* Program includes 9 course offerings 1. Concepts of Wire Feed Welding AND Wire Feed Applications 2. Plasma Cutting and Pipe Welding AND Pipe Welding and Career Readiness

apple ford
customer for life

8800 Stanford Boulevard • Columbia, Maryland 21045

February 24, 2021

Maryland Higher Education Commission
6 North Liberty Street
Baltimore, MD 21201

Attention: James D. Fielder, Jr., Ph.D., Secretary of Higher Education

James.Fielder@Maryland.gov

Dear Dr. Fielder:

I am writing this letter of support on behalf of Lincoln College of Technology located in Columbia, MD. It is my understanding that they are currently working on their MHEC licensing application.

For over 60 years, Lincoln Tech has provided well trained, entry-level workers to the automotive, HVAC, electrical and electronics, welding and culinary professions. The Maryland economy has benefitted significantly from the thousands of skilled trades workers that Lincoln has contributed.

Apple Ford - Lincoln has hired 8 graduates over the course of the last 3 years. We have been pleased with our hires and they have contributed to our company's bottom line. We will be getting back in contact with Lincoln's Career Services Department later this year when we look to fill our current openings.

We urge you to support Lincoln Tech's application for licensure in 2021. They are training the next generation of Maryland's essential employees.

Sincerely,

Curtis Ford

Curtis Ford
Service Manager
Apple Ford - Lincoln

1-800-673-2466 • Local 410-290-1100 • Baltimore 410-995-6646
www.appleford.com • Fax 410-312-0925

1409-A Tangier Drive
Baltimore, MD 21220

BGE HOME

A Constellation Company

February 24, 2021

Maryland Higher Education Commission
6 North Liberty Street
Baltimore, MD 21201

Attention: James D. Fielder, Jr., Ph.D., Secretary of Higher Education

James.Fielder@Maryland.gov

Dear Dr. Fielder:

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For over 60 years, Lincoln Tech has provided well trained, entry-level workers to the automotive, HVAC, electrical and electronics, welding and culinary professions. The Maryland economy has benefitted significantly from the thousands of skilled trades workers that Lincoln has contributed.

BGE HOME has hired dozens of HVAC graduates over the course of the last 3- 5 years and has had a long standing relationship with Lincoln Tech. We have been pleased with our hires and they have contributed to our company's bottom line. We will be getting back in contact with Lincoln's Career Services Department later this year when we look to fill our current openings.

We urge you to support Lincoln Tech's application for licensure in 2021. They are training the next generation of Maryland's essential employees.

Sincerely,

David M. Ullrich, Jr

David. M. Ullrich, Jr
Director of Training & Development
BGE HOME / Constellation Home

BREEDEN COMPANIES

8101 FLANNERY COURT, MANASSAS, VA 20109 • PHONE 703-631-2711

February 19, 2021

Maryland Higher Education Commission
6 North Liberty Street
Baltimore, MD 21201

Attention: James D. Fielder, Jr., Ph.D., Secretary of Higher Education

James.Fielder@Maryland.gov

Dear Dr. Fielder:

I am writing this letter of support on behalf of Lincoln College of Technology located in Columbia, MD. It is my understanding that they are currently working on their MHEC licensing application.

Breeden Heating and Air, Inc has just recently partnered with Lincoln Tech Career Services Dept. on January 14, 2021. We have found them to be extremely helpful and responsive in an effort to place students and alumni. Since then, we have hired 2 graduates and sent offers of employment to 2 others, 1 of which is scheduled to start on March 2, 2021. We have been pleased with all of the candidates that we have interviewed and fully expect that our new hires will grow into lead roles that will contribute to our company's future growth. We have recently received resumes for upcoming graduates and will continue to interview as we look to fill our current and future openings.

We urge you to support Lincoln Tech's application for licensure in 2021. They are training the next generation of Maryland's essential employees.

Sincerely,

Adam Kearney
Director of HVAC Operations
Breeden Heating and Air, Inc.

BUSPATROL

8540 Cinder Bed Rd #400
Lorton, VA 22079

February 22nd, 2021

Maryland Higher Education Commission
6 North Liberty Street
Baltimore, MD 21201
Attention: James D. Fielder, Jr., Ph.D., Secretary of Higher Education

James.Fielder@Maryland.gov

Dear Dr. Fielder:

I am writing this letter of support on behalf of Lincoln College of Technology located in Columbia, MD. It is my understanding that they are currently working on their MHEC licensing application.

For over 60 years, Lincoln Tech has provided well trained, entry-level workers to the automotive, HVAC, electrical and electronics, welding and culinary professions. The Maryland economy has benefitted significantly from the thousands of skilled trades workers that Lincoln has contributed.

BusPatrol has hired 4 graduates over the course of this past year (2020 – 2021). We have been pleased with our hires and they have contributed to our company's bottom line. We will continue to contact and work with Lincoln's Career Services as we look to fill our current openings.

We urge you to support Lincoln Tech's application for licensure in 2021. They are training the next generation of Maryland's essential employees.

Sincerely,

Gabriel Manno
Talent Acquisition Partner
gabriel.manno@buspatrol.com

BusPatrol
buspatrol.com

Springfield
7921 Woodruff Court
Springfield, VA 22151

Richmond
116 Sylvia Drive, Suite F
Ashland, VA 23005

Capitol Boiler Works INC.
Founded in 1936
"Keeping The Heat and Air Conditioning On"
1-800-296-6881
www.capitolboilerworks.com

Baltimore
1730 Twin Springs Road #217
Baltimore, MD 21227

Eastern Shore
27013 East Lillian Street
Hebron, MD 21830

February 23, 2021

Maryland Higher Education Commission
6 North Liberty Street
Baltimore, MD 21201
Attention: James D. Fielder, Jr., Ph.D., Secretary of Higher Education

James.Fielder@Maryland.gov

Dear Dr. Fielder:

I am writing this letter of support on behalf of Lincoln College of Technology located in Columbia, MD. It is my understanding that they are currently working on their MHEC licensing application.

For over 60 years, Lincoln Tech has provided well trained, entry-level workers to the automotive, HVAC, electrical and electronics, welding, and culinary professions. The Maryland economy has benefitted significantly from the thousands of skilled trades workers that Lincoln has contributed.

Capitol Boiler Works, Inc. has hired a significant number of graduates over the course of the last five (5) years. We have been pleased with our hires and they have contributed to our company's bottom line and future growth. We will be getting back in contact with Lincoln's Career Services Department later this year when we look to fill our current openings.

We urge you to support Lincoln Tech's application for licensure in 2021. They are training the next generation of Maryland's essential employees.

Sincerely,

Kenneth Thomas
Capitol Boiler Works, Inc
Vice President of Service
(703) 766-3134 Direct
(703) 573-6881 Office
(703) 766-3152 Fax
kthomas@capitolboilerworks.com
7921 Woodruff Court
Springfield, Virginia 22151
United States

CLARK SERVICE GROUP
SINCE 1971

February 22, 2021
Maryland Higher Education Commission
6 North Liberty Street
Baltimore, MD 21201

Attention: James D. Fielder, Jr., Ph.D.,
Secretary of Higher Education
James.Fielder@Maryland.gov

Dear Dr. James Fielder:

I am writing this letter of support on behalf of Lincoln College of Technology located in Columbia, MD. It is my understanding that they are currently working on their MHEC licensing application.

Lincoln Tech provides its students with a foundation of skills which allow them to be successful and productive members of the workforce. The HVAC/R curriculum touches on all aspects of the trade, giving the students enough time on each to give the graduates direction in deciding which facet of the trade they would like to specialize in. I.E. residential, commercial, industrial, food service...

Clark Service Group has hired 8 graduates during my 3-year tenure as Branch Operation Manager. Not all the hires worked out at Clark Service Group, but some of the Lincoln graduates are excelling. I have even promoted one of the graduates to a Proactive Maintenance Supervisor. We are currently working with Lincoln's Career Services Department to get more graduates started in our interview/ hiring process.

We urge you to support Lincoln Tech's application for licensure in 2021. They are training the next generation of Maryland's skilled tradesman and essential employees.

Sincerely,
Joshua Perkins
Joshua J. Perkins
jperkins@clarkservicegroup.com
Branch Operations Manager
Clark Service Group

DARCARS Automotive Group

February 19, 2021

Maryland Higher Education Commission
6 North Liberty Street
Baltimore, MD 21201
Attention: James D. Fielder, Jr., Ph.D., Secretary of Higher Education

James.Fielder@Maryland.gov

Dear Dr. Fielder:

I am writing this letter of support on behalf of Lincoln College of Technology located in Columbia, MD. It is my understanding that they are currently working on an MHEC licensing application and I wanted to weigh in.

As a former Maryland Secretary of Labor, Licensing and Regulation and Acting Secretary of Business and Economic Development, you are acutely aware of the current shortage of well-trained "skilled trades" workers in America and specifically in Maryland. This shortage has been magnified by the COVID epidemic – as many tradesmen and women elected to retire when the pandemic began to claim the lives of people who were front line and essential personnel.

For over 60 years, Lincoln Tech has provided well trained, entry-level workers to the automotive, HVAC, electrical and electronics, welding and culinary professions. The Maryland economy has benefitted significantly from the thousands of skilled trades workers that Lincoln has contributed.

DARCARS has hired Dozens graduates over the course of the last 5 years. We have been pleased with our hires and they have contributed to our company's bottom line. We will be getting back in contact with Lincoln's Career Services Department later this year when we look to fill our current openings.

I urge you to support Lincoln Tech's application for licensure in 2021.

Sincerely,

Farzad Makarehchi
Corporate Technical Director
DARCARS Automotive Group

Fitzgerald AUTO MALLS

Fitzgerald Subaru
Subaru • Used • Service • Parts
11407 Rockville Pike, Rockville, MD 20852
phone: 301-230-9000 | FitzMall.com

February 24, 2021

Maryland Higher Education Commission
6 North Liberty Street
Baltimore, MD 21201
Attention: James D. Fielder, Jr., Ph.D., Secretary of Higher Education

James.Fielder@Maryland.gov

Dear Dr. Fielder:

I am writing this letter of support for the Lincoln College of Technology located in Columbia, MD. I understand that they are currently working on an MHEC licensing application, and I wanted to weigh in.

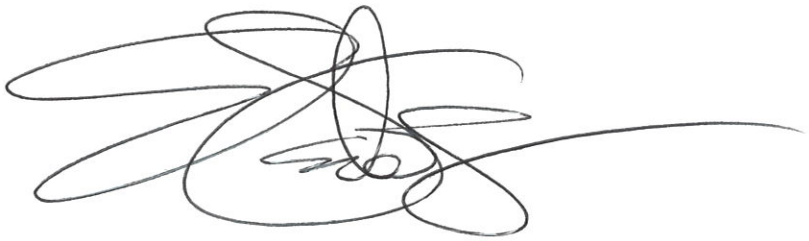
As you are aware, we have a significant shortage of well-trained technicians in our industry. Through 2019, a large number of our experienced workforce was on the brink of retirement as very few technicians were coming into our industry. Since the COVID-19 pandemic, many have chosen to take early retirement leaving us with a massive void in the workforce.

Lincoln Tech has provided well-trained, entry-level workers to the automotive industry for many years. The Maryland economy has benefitted significantly from the thousands of skilled trades workers that Lincoln has contributed.

On a personal level, our business has benefitted operationally and economically by hiring 20 graduates throughout the last year and a half alone. We are pleased with our recent hires, and we rely on Lincoln Tech to help meet our upcoming hiring needs.

I urge you to support Lincoln Tech's application for licensure in 2021.

Sincerely,



Eddie Santos
Corporate Service Operations Director
Fitzgerald Auto Malls, Inc.

From:	Cory Hughes
To:	Ivana Salerno-Hiter
Subject:	FW: Christopher - How has LTI helped JCI?
Date:	Monday, February 22, 2021 2:16:13 PM

From: Christopher Allen Brown <christopher.2.brown@jci.com>
Sent: Monday, February 22, 2021 1:50 PM
To: Tafia Pringle <TPringle@lincolntech.edu>
Cc: Christopher Godwin <christopher.godwin@jci.com>
Subject: RE: Christopher - How has LTI helped JCI?

Hi Tafia,

I have attached the requested letter to this email and look forward to continuing our working relationship in the future.

Thank you
Chris

February 22, 2021
Maryland Higher Education Commission
6 North Liberty Street
Baltimore, MD 21201
Attention: James D. Fielder, Jr., Ph.D., Secretary of Higher Education

James.Fielder@Maryland.gov

Dear Dr. Fielder:

I am writing this letter of support on behalf of Lincoln College of Technology located in Columbia, MD. It is my understanding that they are currently working on their MHEC licensing application.

For over 60 years, Lincoln Tech has provided well trained, entry-level workers to the automotive, HVAC, electrical and electronics, welding and culinary professions. The Maryland economy has benefitted significantly from the thousands of skilled trades workers that Lincoln has contributed.

Johnson Controls has hired 4 graduates over the course of the last 3 years. We have been pleased with our hires and they have contributed to our company's bottom line. We will be getting back in contact with Lincoln's Career Services Department later this year when we look to fill our current openings.

We urge you to support Lincoln Tech's application for licensure in 2021. They are training the next generation of Maryland's essential employees.

Sincerely,

Christopher Brown
Inspection Manager
Johnson Controls

Mercedes-Benz

Mercedes-Benz of Arlington

February 19, 2021

Maryland Higher Education Commission
6 North Liberty Street
Baltimore, MD 21201

Attention: James D. Fielder, Jr., Ph.D., Secretary of Higher Education

James.Fielder@Maryland.gov

Dear Dr. Fielder:

I am writing this letter of support on behalf of Lincoln College of Technology located in Columbia, MD. It is my understanding that they are currently working on their MHEC licensing application.

For over 60 years, Lincoln Tech has provided well trained, entry-level workers to the automotive profession. The economy has benefited significantly from the thousands of skilled trades workers that Lincoln has contributed.

Mercedes Benz of Arlington has hired 15 graduates over the course of the last 4 years. We have been pleased with our hires and they have contributed to our company's bottom line. We will be getting back in contact with Lincoln's Career Services Department later this year when we look to fill our current openings.

We urge you to support Lincoln Tech's application for licensure in 2021. They are training the next generation of essential employees.

Sincerely,

Douglas Hinken
Automotive shop manager
Mercedes Benz of Arlington

585 North Glebe Road
Arlington, Virginia 22203-2197

Telephone: (703) 525-2100
Fax: (703) 525-1430

Email: sales@ascmb.com
www.justmercedes.com

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Overhead Door Company of Washington, D.C.™

A Subsidiary of Mid-Atlantic Door Group, Inc.

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301-937-1800

Northern Virginia
8641 Virginia Meadows Drive
Manassas, VA 20109
703-334-4050

Overhead Door Co. of Frederick
1500 Bowmans Farm Road
Frederick, MD 21701
240-415-7211

To whom it may concern:

The Mid-Atlantic Door Group, Inc., distributors of Overhead Door Corporation products, started in 1973 and now consists of eight office and warehouse locations which have been strategically placed to best service our markets throughout Maryland, Washington, D.C., Virginia, and Pennsylvania. We proudly offer the industry's best in both residential and commercial garage door products and services. In addition to doors and operators, we also offer a complete line of loading dock equipment for our commercial customers. Along with sales and installations, we also provide the area's most trusted garage door repairs, with emergency service available 24-hours a day. Our staff and technicians use the most up-to-date systems to assist our customers with all of their garage door needs.

Overhead Door Company of Washington DC seeks ambitious and dedicated professionals to fill positions at all levels of our organization. Our biggest challenge is hiring mechanically inclined individuals to fill our ranks. We recently have partnered with Lincoln Tech to help get qualified candidates to train for careers as garage door technicians. We have received resumes from the electrical and welding training at Lincoln Tech. This has been a great avenue for us and to continue this great relationship with the school.

Charles Whitaker
Vice President of Operations

February 24, 2021

Maryland Higher Education Commission
6 North Liberty Street
Baltimore, MD 21201

Attention: James D. Fielder, Jr., Ph.D., Secretary of Higher Education

James.Fielder@Maryland.gov

Dear Dr. Fielder:

I am writing this letter of support on behalf of Lincoln College of Technology located in Columbia, MD. It is my understanding that they are currently working on their MHEC licensing application.

For over 60 years, Lincoln Tech has provided well trained, entry-level workers to the automotive, HVAC, electrical and electronics, welding and culinary professions. The Maryland economy has benefitted significantly from the thousands of skilled trades workers that Lincoln has contributed.

Penske has hired over 20 graduates in the state of Maryland over the course of the last 2 years. Lincoln Tech has become an integral part of our success by fulfilling our staffing needs with highly qualified and talented candidates from the automotive program. Lincoln Tech graduates have excelled rapidly within our organization as a direct result of the training and education that they have received from Lincoln Tech. The positive impact that these students have on our company is substantial as it allows us to increase our technician headcount to help us grow our business. As a result of the success that we have experienced, Penske is in the process of creating additional automotive technician positions throughout the state of Maryland for the sole purpose of hiring Lincoln Tech students. We are very excited to continue expanding our partnership with Lincoln Tech!

We urge you to support Lincoln Tech's application for licensure in 2021. They are training the next generation of Maryland's essential employees.

Sincerely,

Scott

Scott Emge
Assistant District Manager
T 301-498-3000
C 717-269-3287
E scott.emge@penske.com

Penske
Rental I Leasing I Logistics
8685 Washington Blvd.
Jessup, MD 20794 USA

PETRO HOME SERVICES

8900 Citation Road
Baltimore, MD 21221

T 1.800.645.4328
F 410.238.4080

petro.com

February 24, 2021

Maryland Higher Education Commission
6 North Liberty Street
Baltimore, MD 21201

Attention: James D. Fielder, Jr., Ph.D., Secretary of Higher Education

James.Fielder@Maryland.gov

Dear Dr. Fielder:

I am writing this letter of support on behalf of Lincoln College of Technology located in Columbia, MD. It is my understanding that they are currently working on their MHEC licensing application.

For over 60 years, Lincoln Tech has provided well trained, entry-level workers to the automotive, HVAC, electrical and electronics, welding and culinary professions. The Maryland economy has benefitted significantly from the thousands of skilled trades workers that Lincoln has contributed.

Petro Home Services has hired 12 graduates over the course of the last two years. We have been pleased with our hires and they have contributed to our company's bottom line. We will be getting back in contact with Lincoln's Career Services Department later this year when we look to fill our current openings.

We urge you to support Lincoln Tech's application for licensure in 2021. They are training the next generation of Maryland's essential employees.

Sincerely,

Steve Millington

Steve Millington
General Manager
Petro Home Services

10000 Derekwood Lane | Lanham, Maryland 20706 | rcn.com

February 23, 2021

To Whom It May Concern:

I would like to formally and sincerely express my gratitude for the amazing work of the Lincoln Technical College staff. I've had the pleasure of working with Tafia Pringle and her team in the Career Services Office since 2017.

RCN is a telecommunications provider and we are constantly hiring entry level Cable Installers/ Technicians. Recently, we have had some challenges finding the best candidates to fill our open positions. Since we began our partnership with the Career Services Office at Lincoln Tech, we have found success hiring the recent graduates in the Electrical and Electronics Program to fill our vacancies. The Electrical and Electronics certification program is impressive, demonstrates discipline in key technical areas and provides preparation for the real world. RCN has hired around 15 graduates from the Electrical and Electronics certification program over the last two years.

The program at Lincoln Tech directly impacted RCN being able to achieve its recruitment goals and provide a positive customer experience to our customers. We appreciate all that you do for us!

Once again, thank you for offering an exceptional career program that allows students to find a rewarding career path. I look forward to our continued partnership in the future!

Sincerely,

Debora Lewis, SPHR, SHRM-SCP
Senior Director, Human Resources
RCN-DC Market

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RRR Automotive Group
16600 Governor Bridge Rd.
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301-542-0118 fax
rrr@rrrautos.com

February 24, 2021

Maryland Higher Education Commission
6 North Liberty Street
Baltimore, MD 21201

Attention: James D. Fielder, Jr., Ph.D., Secretary of Higher Education

James.Fielder@Maryland.gov

Dear Dr. Fielder:

I am writing this letter of support on behalf of Lincoln College of Technology, located in Columbia, MD. I understand that they are currently working on an MHEC licensing application, and I wanted to share how vital Lincoln College of Technology is to RRR Automotive.

Our partnership with Lincoln College of Technology has been a "game-changer" for RRR Automotive. Our most significant need is for skilled automotive technicians. We cannot continue to meet the needs of our customers without skilled technicians. The knowledge and hands-on skills that the students receive from Lincoln College of Technology is a great base. When the students start their career with RRR Automotive, they are very well prepared. Not only do the students receive training on how to repair an automobile, but they also receive "soft skills" training which is very important when working with customers.

For over 60 years, Lincoln College of Technology has provided well-trained, entry-level workers to the automotive, HVAC, electrical and electronics, welding, and culinary professions. The Maryland economy has benefitted significantly from the thousands of skilled trades workers that Lincoln has contributed.

RRR Automotive has benefitted operationally and economically by hiring 23 students since 2018. We are pleased with our recent hires, and we look forward to hiring many more students from Lincoln College of Technology.

I urge you to support Lincoln College of Technology's application for licensure in 2021.

Sincerely,

Rose M. Bayat
Director of Customer Retention
rose@rrrautos.om
301-717-3419

BMW HONDA HYUNDAI KIA Mercedes-Benz TOYOTA Toyota Certified At Capital Plaza

February 24, 2021

Maryland Higher Education Commission
6 North Liberty Street
Baltimore, MD 21201

Attention: James D. Fielder, Jr., Ph.D., Secretary of Higher Education

James.Fielder@Maryland.gov

Dear Dr. Fielder:

I am writing this letter of support on behalf of Lincoln College of Technology located in Columbia, MD. It is my understanding that they are currently working on their MHEC licensing application.

For over 60 years, Lincoln Tech has provided well trained, entry-level workers to the automotive, HVAC, electrical and electronics, welding and culinary professions. The Maryland economy has benefitted significantly from the thousands of skilled trades workers that Lincoln has contributed.

Victoria Restaurant Group has hired numerous graduates over the course of the last 14 years as well as employed many interns while still in the program. We have been pleased with our hires and they have contributed to our company's bottom line and success. We will be getting back in contact with Lincoln's Career Services Department later this year when we look to fill our current openings.

We urge you to support Lincoln Tech's application for licensure in 2021. They are training the next generation of Maryland's essential employees.

Sincerely,

Rachael Mull
Chief Executive Officer
Victoria Restaurant Group, LLC
rachael@victoriarestaurantgroup.com
410-997-7771
4411 Manor Lane
Ellicott City, MD 21042