Skilled Trades
Associate of Applied Science

General Program Information: 410 287-1000 or information@cecil.edu

The Skilled Trades, Associate of Applied Science (AAS) degree program offers students the opportunity to gain specialized skills and knowledge in Transportation and Construction. This comprehensive program is designed to prepare students for a successful career in skilled trades, equipping them with the practical skills and theoretical knowledge necessary to excel in their chosen concentration. Students can choose from two significant concentrations, Transportation or Construction, with multiple sub-concentration options within each category.

	General Education Requirements (20 credits)	***General Education Code***	***Credits***
HUM 101 or SPH 141	Introduction to Critical Inquiry Public Speaking	H	3
PSY 101 or SOC 101	Introduction to Psychology Introduction to Sociology	SS	3
EGL 101	College Composition	E	3
MAT	Math Elective	M	3-4
Select one: CSC 105 or ECO 221 or ECO 222	 Geographic Information System Economics – Micro Economics – Macro	 I S SS	3
SCI	Science Elective with Lab	S / SL	4
	Program Requirements (40 Credits)		
ACC 101	Accounting I		3
BUS 103	Introduction to Business		3
BUS 216	Organizational Leadership		3
ELECT	Electives[1]		1 – 22
ELECT	Skilled Trades Credential Assessment (from either the Transportation concentration **or** Construction concentration)		10 – 30

Total Credits Required in Program: 60

Transportation Concentration

Students must complete two areas and provide certification to receive credits through credential assessment.

- **Automotive Repair**: 8 Credits
  - Engine Repair – ASE Certification A1
  - Suspension & Steering – ASE Certification A4
  - Brakes – ASE Certification A5
  - Electrical/Electronic Systems – ASE Certification A6
  - Engine Performance – ASE Certification A8
- **Diesel Technology**: 8 Credits
  - Diesel Engines – ASE Certification T2
  - Electrical/Electronic Systems – ASE Certification T6
- **Marine Service Technology**: 7 Credits
  - Marine Technician Certification – ABYC
- **CDL A Tractor Trailer Training:** 13 Credits
  - CDL (Commercial Driver License) – A License
- **CDL B Straight Truck Training:** 5 Credits
  - CDL (Commercial Driver License) – B License
- **CDL B: Passenger Bus Training:** 5 Credits
  - **CDL (Commercial Driver License)** – B+ License Passenger Endorsement

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Construction Concentration

Students have two options for the construction concentration. The first option is to complete two areas: NCCER (National Center for Construction Education and Research), HVAC (Heating, Ventilation, and Air Conditioning), NCCER Welding, or Basic Electrical. The second option is to complete a 2-year internship in the HVAC/R Apprenticeship Program. For both options, students must provide certification to receive credits through credential assessment.

- **NCCER HVAC/R:** 10 Credits
  - NCCER HVAC/R - Level 1
  - EPA 608 Certification
- **NCCER Welding**: 13 Credits
  - Welding - Level 1 NCCER
  - American Welding Society Welder Qualification Card in one of the following processes: AWS (American Welding Society) D1.2 Structural Welding Code - GTAW (Gas Tungsten Arc Welding), D1.1 Structural Welding Code - GMAW (Gas Metal Arc Welding) or D1.1 Structural Welding Code – SMAW (Shielded Metal Arc Welding)
- **Basic Electrical:** 7 Credits
  - NOCTI Electrical Occupations Credential
  - OSHA 10

OR

- **HVAC/R Apprenticeship Program:** 30 Credits
- Complete years 2 and 3 or years 3 and 4 of the HVAC/R Apprenticeship Program for a minimum of 4,000 on-the-job training apprenticeship hours.

[1] Students should work in consultation with an Academic Advisor to determine course selection and the applicable number of credits required to meet the degree requirements. Recommended courses include BUS 190, BUS 187, BUS 131, BUS 207, CIS 101, TRL 101, TRL 107, PHE 111, and VCP 107.

Program Outcomes for the AAS Skilled Trades Degree:

1. Safety and Compliance: Graduates ensure safety and regulatory compliance and demonstrate the use of protocols and regulations pertinent to their chosen trade, whether in transportation or construction.
2. Technical Proficiency: Graduates exhibit technical prowess, applying knowledge and skills to diagnose, troubleshoot, and repair mechanical and electrical components within transportation or construction systems.
3. Inspections and Maintenance: Graduates conduct thorough inspections and maintenance, identifying issues and ensuring the reliability and functionality of vehicles, equipment, and systems.
4. Utilization of Precision Tools: Graduates proficiently utilize precision measuring tools, guaranteeing accuracy in maintenance and repair tasks within transportation or construction contexts.
5. Communication and Collaboration: Graduates communicate effectively and collaborate with peers, clients, and stakeholders, facilitating efficient operation and maintenance of transportation or construction systems.
6. Problem-Solving Skills: Graduates demonstrate critical thinking and problem-solving abilities, tackling operational and maintenance challenges in transportation or construction contexts.
7. Adherence to Ethical and Environmental Practices: Graduates actively uphold ethical practices and environmental regulations, fostering sustainability and social responsibility within their respective industries.

These outcomes capture the core competencies required for success in the AAS Skilled Trades degree program, encompassing transportation and construction specializations. They reflect the skills and knowledge necessary for graduates to thrive in their chosen trades and contribute effectively to their industries.