**AUTOMOTIVE TECHNOLOGY I, II**

**Course Code:**

8605/8606

**Course Description:**

In this program, students explore, handle, and perform basic functions in engine repair, automatic transmission and transaxle, manual drive and axles, suspension and steering systems, and brakes. Second year students will build up their basic knowledge and learn about electrical, electronic, and HVAC systems in automobiles. Students earn dual enrollment credit from Virginia Peninsula Community College in this program.

**Topics of Study:**

**Auto Tech I**

Safety

Hand & Power Tools

Brake Systems

Wheels & Tires

Steering & Suspension

Engine Service & Repair

Manual Drive & Drive Axles

Automatic Transmission & Transaxles

**Auto Tech II**

Safety

Fundamentals of Electricity

Engine Repair

Automatic Transmission & Transaxles

HVAC

**Campus Location:**

Butler Farm, Hampton

**Sessions:**

AM and PM

**Class Size:**

20 students

**Credentials:**

Automotive Service Excellence (ASE) Student Certifications

**Career & Technical Student Organization:**

SkillsUSA

**Work-Based Learning Opportunities:**

Summer Mentorship

Job Shadowing

Paid Internship

**Course Prerequisites:**

GPA of 2.6 or better if seeking dual enrollment credit

Completed 10th grade English with a grade of “C” or better

Must possess a driver’s license or permit

Completion of Auto Tech I with a grade of “C” or better to return for Auto Tech II

**Instructor Bio:**

Timothy Fary

[timothy.fary@nhrec.org](mailto:timothy.fary@nhrec.org)

757-766-1100 ext. 3345

ASE Master Technician

Virginia Motor Vehicle State Safety Inspector

Ford Motor Company Senior Master Technician

ASE Medium/Heavy Truck Certification

A.A.S. Degree, Automotive Technology

ASE L1 Advanced Level Specialist Certification

Refrigerant Recovery & Recycling Certified

Dennis Young

[dennis.young@nhrec.org](mailto:dennis.young@nhrec.org)

757-766-1100 ext. 3318

ASE Master Automotive Technician

ASE Certified in Advanced Engine Performance Diagnosis (L1)

ASE Certified Maintenance and Light Repair (G1)

**Projected Employment:**

Employment of automotive service technicians and mechanics is projected to grow 2 percent from 2022 to 2032, about as fast as the average for all occupations. “Automotive Service Technicians.” Occupational Outlook Handbook, US Bureau of Labor Statistics, 10 October, 2023. <https://www.bls.gov/ooh/installation-maintenance-and-repair/automotive-service-technicians-and-mechanics.htm#tab-1>

**Career Pathways**:

Aircraft Mechanic and Service Technician

Automotive Glass Installer and Repairer

Automotive Service Technician & Mechanic

Heavy Vehicle & Mobile Equipment Service Technician

Diesel Service Technician & Mechanic

Small Engine Mechanic

Program Flyer: (linked)