# **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

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

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)