

D. A. DORSEY TECHNICAL COLLEGE

STUDY A CAREER FOR REAL SUCCESS



Automotive Service Technology
I & II
Work-Base Activity
Instructional Plan
2021-2022

Mission

Our mission is to positively impact the residents of this community through educational and economic empowerment by providing sound academic programs spanning literacy through vocational certification.

Vision

Through effective and proactive leadership, we will unlock the potential of all learners.

Core Values

Excellence: We pursue the highest standards in academic achievement and organizational performance.

Integrity: We build positive relationships through honesty, respect, and compassion, which enhance the self-esteem, safety, and well-being of our students, families, and staff.

Equity: We foster an environment that serves all students and aspires to eliminate the achievement gap.

Citizenship: We honor the diversity of our community by working as a team to ensure the educational success of all our students and recognize that our obligations go beyond our professional responsibilities to promote democratic principles.

Hours of Operation

The campus has classes in session Monday through Friday between 8:00 a.m. and 1:45 p.m. Evening classes are offered Monday through Thursday between 3:55 p.m. and 8:00 p.m. to serve the needs of post-secondary and adult general education students.

Work-Based Activity Instructional Plan

Professional Staff/Roles and Responsibilities

The work-based activity is coordinated by the Automotive Service Technology instructor. The instructor is the liaison between the school and the employment agency. The instructor is responsible for the initial contact with the employer/agency to coordinate the work experiences and communicate the expected objectives, experiences, competencies, and evaluations that are required.

The instructor will also accompany the student to the work experience site and introduce the student to the on-site employer representative responsible for guiding and overseeing the students' learning experiences and participating in the students' written evaluations.

Scope of the Work-Base Plan

Career Ready Practices describe the career-ready skills that educators should seek to develop in their students. These practices are not exclusive to a Career Pathway, program of study, discipline, or level of education. Career Ready Practices should be taught and reinforced in all career exploration and preparation programs with increasingly higher levels of complexity and expectation as a student advances through a program of study.

1. Act as a responsible and contributing citizen and employee.
2. Apply appropriate academic and technical skills.
3. Attend to personal health and financial well-being.
4. Communicate clearly, effectively, and with reason.
5. Consider the environmental, social, and economic impacts of decisions.
6. Demonstrate creativity and innovation.
7. Employ valid and reliable research strategies.
8. Utilize critical thinking to make sense of problems and persevere in solving them.
9. Model integrity, ethical leadership, and effective management.
10. Plan education and career path aligned to personal goals.
11. Use technology to enhance productivity.
12. Work productively in teams while using cultural/global competence.

Work-Base Experience will include the following components:

- Objectives, experiences, competencies, and evaluations
- On-site employer representative responsible for guiding and overseeing the students' learning experiences
- On-site employer representative responsible for participating in the students' written evaluations

Evaluation During the Work Experience:

The designated on-site employer representative responsible for guiding and overseeing the students' learning experiences will participate in the students' written evaluation by documenting when the student successfully demonstrates the current and relevant standards and outcomes.

Current and Relevant Standards and Outcomes:

Automotive Services Technology I

During the work-based experience the student will be able to perform the following:

1. Proficiently explain and apply required shop and personal safety tasks relating to the automotive industry.
2. Explain and apply required tasks associated with the proper use and handling of tools and equipment relating to the automotive industry.
3. Demonstrate proficiency in preparing a vehicle for routine pre/post-maintenance and customer services.
4. Explain and apply proficiently the diagnosis, service, and repair of drum/disc brake, hydraulics, power assist units, electronic brakes, traction control, stability control systems, and miscellaneous (wheel bearings, parking brake, electrical, etc.) systems.
5. Explain and apply proficiently the diagnosis, service, and repair of front and rear suspension systems, wheel alignment, and wheels and tires.
6. Explain and apply proficiently the diagnosis, service, and repair of electrical/electronic system components, battery, starting, charging, lighting, gauges, warning devices, driver information, horn, wiper/washer, and accessory systems.
7. Explain and apply proficiently the diagnosis, service, and repair of engines, cylinder heads, valve train, engine block, lubrication, and cooling systems.

Automotive Services Technology II

During the work-based experience the student will be able to perform the following:

1. Explain and apply proficiently the diagnosis, service, and repair of engines, ignition, fuel, air induction, exhaust, computer engine, and emission control systems.
2. Explain and apply proficiently the diagnosis, service, repair, and overhaul of automatic transmissions/transaxles.
3. Explain and apply proficiently the operation, assembly, diagnosis, service, and repair of manual drivetrains, clutches, transmissions/transaxles, drive and half-shaft universals, constant velocity joints, rear axle differential assembly, limited-slip, four-wheel drive, and all-wheel drive.
4. Explain and apply proficiently the diagnosis, service, and repair of heating and air conditioning, refrigeration, compressors, compressor clutches, evaporators, receiver driers, accumulators, condensers, heating and engine cooling, related control systems, refrigerant recovery, and recycling and handling.