Automotive Technician Courses

### Power Systems 1 & 2
1 Credit, Gr. 9, 10, 11, 12
Course # 3710

**Prerequisite:** None. This is an introductory course which includes an orientation, shop procedures and safety related to hydraulics and small engines and automotive diagnosis and repair. Included is an introduction to hand and power tool identification and use, basic fastener identification and applications, and measuring tool identification and use. (NO Lab/Material fee required.)

### Transportation Systems 3 & 4 Capstone (AS)
2 Credits, Gr. 10, 11, 12
Course # 3713

**Prerequisite:** Power Systems 1 & 2; Permission of Instructor. This is a competency-based course in which the students work on electrical systems, computer control systems, brake systems, suspension systems and alignment, air conditioning and engine repair. This course is in preparation for voluntary Auto Service Excellence (ASE) certification and advanced placement in the Automotive Technology Program at Gateway Technical College. (NO Lab/Material fee required.)

### Auto Technician 1
1 Credit, Gr. 11, 12
Course # 3716

**Prerequisite:** Transportation Capstone; Permission of Instructor. This is a competency-based course in which the students work on engine performance including engine mechanical diagnosis, computer controls, emission controls, fuel management systems and ignition systems, automatic transmissions, manual transmissions and drivelines. This course is in preparation for voluntary Auto Service Excellence (ASE) certification and advanced placement in the Automotive Technology Program at Gateway Technical College. This course is taught in the evening, two nights per week, outside of the regular school-day schedule. (NO Lab/Material fee required.)

### Automotive Youth Apprenticeship OJT 1 (AS)
2 Credits, Gr. 11, 12
Course # 3717

**Prerequisite:** Concurrent enrollment in Auto Technician 1 or Auto Technician 2, successfully completed application package and Advisory Committee Interview; Permission of Instructor. Students will explore their interests, abilities, and aptitudes as they apply to the automotive services industry. This program provides school-based academic and work-based occupational skills necessary for employment and/or for advanced standing in a post-secondary technical program. This course includes an on-the-job training (OJT) component in a local automotive repair facility coordinated by the AYES/Transportation Youth Apprenticeship instructor and specific experiences in the areas of: Electrical Engine Repair, Engine Performance, Automatic Transmissions, Manual Transmissions and Drive Lines, and Suspensions and Brakes. Students must register and go through an application and interview process in order to be accepted into the program. Students work an average of 15 hours per week at a local automotive repair facility. **Students in this program must also be enrolled in a direct-related instruction course (3716 or 3718) each semester enrolled in the program for the school-based learning component.** For more details, see Youth Apprenticeship Programs in this Course Description Guide. This course is in preparation for voluntary Auto Service Excellence (ASE) certification, AYES certification and advanced placement in the Automotive Technology Program at Gateway Technical College. (NO Lab/Material fee required.)

### Transportation System RISE
1 Credit, Gr. 11, 12
Course # 3714

**Prerequisite:** Completion of Transportation Capstone 3 & 4; Permission of Instructor. For the student who has completed the full transportation program, who chooses to pursue advanced training in the field of Automotive Technology and/or serve as a teacher helper. (Lab/Material fee required.)
Auto Technician 2
1 Credit,  Gr. 12
Course # 3718

Auto Technician 2
Prerequisite: Auto Technician 1; Permission of Instructor. This is a competency-based course in which the students work on advanced engine performance such as engine mechanical diagnosis, computer controls, emission controls, fuel management systems and ignition systems, automatic transmissions, manual transmissions and drivelines. This course is in preparation for voluntary Auto Service Excellence (ASE) certification and advanced placement in the Automotive Technology Program at Gateway Technical College. This course is taught in the evening, two nights per week, outside of the regular school-day schedule. (NO Lab/Material fee required.)

Automotive Youth Apprenticeship OJT 2
2 Credits,  Gr. 12
Course # 3719

Automotive Youth Apprenticeship OJT 2
Prerequisite: Concurrent enrollment in Auto Technician 2; Permission of Instructor. Students will continue their exploration of the automotive services industry. School-based academic and work-based advanced engine performance occupational skills, including engine mechanical diagnosis, computer controls, emission controls, fuel management systems and ignition systems, will remain the focus in this advanced on-the-job (OJT) training situation at a local automotive repair facility coordinated by the Transportation Youth Apprenticeship instructor. This course is in preparation for voluntary Auto Service Excellence (ASE) certification and advanced placement in the Automotive Technology Program at Gateway. Students work an average of 15 hours per week at a local automotive repair facility. Students in this program must also be enrolled in a direct-related instruction course (3718) each semester enrolled in the program for the school-based learning component. For more details, see Youth Apprenticeship Programs in this Course Description Guide. This course is in preparation for voluntary Auto Service Excellence (ASE) certification, AYES certification and advanced placement in the Automotive Technology Program at Gateway Technical College. (NO Lab/Material fee required.)