



# Automotive – Brakes Specialist

Certificate of Completion (CC)

Planning Guide 2017-2018

EPC 712Y

## Program Information:

**Length of Program:** 38 – 50 Credits  
**Completion Award:** Certificate of Completion  
**Approximate Quarterly Costs:**  
Lab Fee: \$125.90  
Tools and equipment: approximately \$4000 (Dealership experience only)  
(in addition to tuition, books and parking)

**Website:** [www.shoreline.edu/auto/](http://www.shoreline.edu/auto/)

## Program Advisors:

See **Jacque Ogilvie** for appropriate Program Advisor  
206-546-5851 [jogilvie@shoreline.edu](mailto:jogilvie@shoreline.edu) Rm 2160

## Program Description:

The Certificate of Completion as a Brakes Specialist is designed to prepare students for careers in the automotive service industry. Shoreline Community College works closely with local advisory committees and industry professionals to ensure students receive the knowledge and skills currently in demand by employers in the field. Students interested in pursuing additional education opportunities should review industry specific A.A.S. degrees and the Engineering AS-DTA transfer degree planning guide.

## Automotive Brakes Specialist —What is it?

Shoreline Community College offers four Specialist Certificates of Completion for students who are interested in entering the automotive service industry. These certificates are only available to students in one of the manufacturer-specific programs. Those programs include the General Motors (ASEP), Toyota (T-TEN), Honda (PACT), or MoparCAP programs. The Automotive Program provides students with the fundamental skills to succeed in the workplace along with valuable hands-on experience. Students alternate quarters between classroom instruction and paid worksite training. As students progress through the curriculum, they learn about the major automobile components and systems, including brakes, suspension, emissions, transmissions, electrical systems, heating and air conditioning, power trains and engine management systems. Students develop skills in automotive diagnostics, tune-ups and repairs. Students will also develop an understanding of automotive service business principles as they apply to the service technician. In their internship placement, students work under the guidance of a master technician at a sponsoring approved repair facility. These paid internships give students the opportunity to integrate their learning and further develop their skills in automotive service technology. Students will have to complete additional requirements in addition to completing all four automotive certificates in order to be awarded manufacturer-specific certification. These additional requirements are specific to the individual programs. This certificate requires that the student complete the on-campus classes followed by a qualifying co-op work experience.

## Program Outcomes:

Students who successfully complete this program **-by achieving a grade of 2.0 or better for each individual course in the program-**should be able to:

1. Apply fundamentals of automotive service training, including the basics of automotive diagnostics and repair, pre-delivery inspection and warranty repair procedures.
2. Identify, inspect, disassemble and assemble basic components of automotive power plants.
3. Apply knowledge of the function, construction, operation, troubleshooting and servicing of disc, drum and ABS brake systems, steering, suspension and wheel alignment.
4. Use electronic engine analyzers and scanners to test and tune ignition, fuel injection and emission systems.
5. Apply understanding of electrical principles, semi-conductors, microprocessors and wiring diagrams to diagnose and repair malfunctions of automotive electrical systems.
6. Apply knowledge of the function, construction, operation, troubleshooting and service of front- and rear- wheel drive, manual and automatic transmissions and transaxles.
7. Test, service and repair heating and air-conditioning systems.

## Career Opportunities—What can I do with a Certificate in Automotive Brakes Specialist?

The placement rate for this program is 100%. The demand for dealer-trained technicians should remain strong over the next decade. Graduates may be hired as Automotive Service Technicians. With additional experience many technicians can become a Parts or Service Manager; some may seek positions in sales, management or open their own related business.

**Potential employers include:** Upon completion, students are usually hired by their sponsoring dealership. For more, please visit career information and resources at [www.shoreline.edu/acc/CareerCounseling.aspx](http://www.shoreline.edu/acc/CareerCounseling.aspx).

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### Program Prerequisites:

- Placement into ENGL& 101
- Sponsorship by a Participating Approved Repair Facility
- Automotive Skills Test
- Valid Driver’s License
- Proof of Insurability
- Some Dealers Require Drug Testing
- Instructor Interview

### Certificate of Completion – 38-50 Credits

Automotive Core Requirements   38-50 Credits			
Course	QTR	GR	CR
AUTOT 160/180T Fund of Auto Serv Traing			9
AUTOT 163/183T Brakes & Suspension			9-21
AUTOT 291      Coop Dealer Exper I or AUTOT 292      Coop Dealer Exper II or AUTOT 293      Coop Dealer Exper III or AUTOT 294      Coop Dealer Exp IV			20

Recommendations:

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Note: Every effort has been made to ensure the accuracy of the information in this publication. However, the information is subject to change without notice and final career decisions are the responsibility of the student.

### CERTIFICATE COMPLETION

Students should automatically receive their Certificate after successful completion of all required courses. If you have not received your Certificate, please contact the Workforce Education Programs in FOSS 5100 or call 206-546-5876.