



# Automotive Technology

## Admissions Information

### Application Materials

Students wanting to apply for a degree seeking program at the College of Eastern Idaho (CEI) must submit all of the following application materials for review. Admissions counselors will evaluate the application documents to ensure everything has been completed correctly.

- Application for admission
- High School or GED Transcripts, must be official copies
- Official Transcripts from all post-secondary institutions attended
- Math and English placement

### Placement Scores

Students at CEI must have current placement into our basic math and English classes. If you need to take the ALEKS or Gain exams in order to prove placement you can schedule a time with our Testing Center by calling 208-535-5438.

Common tests and placement scores that we require are as follows:

Placement Test	English Score	Math Score
ACT	18 or higher	17 or higher
SAT	500 or higher	430 or higher
ALEKS Math	-	14 or higher
Gain	747 or higher	670 or higher

### Transfer Credits

If you have attended any other college or universities you will need to send your official transcripts to CEI. It's possible for previously completed courses to transfer in to fulfill specific degree requirements. Please note the following guidelines from transfer course work to CEI:

- All transfer classes must have a final grade of a C or higher
- Only classes required for your program will be transferred in
- Some classes (like math and biology) can expire after 5 years

An admissions advisor can do an unofficial review of your transfer credits. The official evaluation is done after the admissions process is completed and will be available to the student at their New Student Orientation.

### Student Orientation, Advising, and Registration (SOAR)

After you have received an acceptance letter into the college you will be required to attend a Student Orientation, Advising, and Registration. You will be able to enroll in classes during this event and it is the last step in the admissions process.

### Financial Aid

This program is financial aid eligible. Our school code is: 0011133. If you are planning on applying for financial aid and have any questions please contact our Financial Aid office in room # 348 or call 208-535-5374

## **AT Program Information**

The Automotive Technology program is comprised of three different certificates/degrees. There is an Associates of Applied Science degree (AAS), Advanced Technical Certificate (ATC), and Intermediate Technical Certificate (ITC).

- The AAS is a 69 credit, 4 semester, program that includes general education courses.
  - It is recommended that students take general education courses before or after the program.
- The ATC is a 54 credit, 4 semester, program
- The ITC is a 30 credit, 2 semester, program

When students are accepted into the AT program they will be placed into a cohort for the fall semester.

### **Program Overview**

Automotive students will spend approximately two hours per day in the classroom and 4 ½ hours performing hands-on training in the labs. Students will develop the necessary skills a technician needs in order to repair, service, and overhaul a variety of vehicles and machines. Complex problem solving skills will be used regularly to perform routine maintenance and diagnostic repairs. Additionally, students will utilize and build their mechanical aptitudes and computer and math skills.

All instructors are Automotive Service Excellence (ASE) certified. CEI has adopted the nine ASE areas as guidelines for the Automotive Program (Automobile and Light Truck A1-A9). The program is designed to give students practical experience in order to meet ASE certification standards. Throughout the practical experience, troubleshooting and repair experiences will be performed on mock-ups and live work projects in the college lab.

The hands-on experience students receive in this program will prepare them for work in a large variety of facilities. Many of our graduates are working at large and small dealerships, auto part dealers, national and local automotive chains, transmission and specialty shops, state and federal transportation departments, service stations, truck stops, semi-truck and farm equipment dealers, and in agriculture.

### **Program Requirements**

In order for students to be accepted into the Automotive Technology program they must complete the CEI application process (see page 1).

Once in the program, students must pass their program specific courses with a minimum grade of C (75%) or higher and must be passed consecutively before continuing on to the next course.

Expectant graduates may be required to sit for proficiency exams at the conclusion of their program. Information regarding costs and dates for the exams will be posted in the online catalog and will be available from the program instructor(s).

### **Attendance Policy**

- Students are allowed to miss one day a month
- Classes start promptly at 8:00 AM
- If you will be late or absent you must call or email the appropriate people ahead of time
- Consequences are enforced if rules are not followed
- \*Refer to your instructor to verify what their specific policy is

### **Competitive Program**

The Automotive Technology program is competitive. There are 11 seats available each Fall semester. Students will be put on our waitlist in the order we receive their application materials. In order to increase your chances of entering the program early you must submit your application, transcripts, and test scores to CEI as soon as possible. If a student is not accepted into the program for the fall they will remain on the waitlist until they are accepted.

### **Message from the Faculty**

- “It will not be an easy program.”
- “There is more technology involved than you think, so be prepared.”
- “You will spend 1/3 of your time in the classroom.”

### **Message from the students**

- “The hands-on experience is awesome, you learn from the book and practice in the shop.”
- “It is not an easy program.”
- “Be aware that you will need to purchase books and tools, which can be expensive.”
- “Know the difference between programs. Heavy duty works on large diesel vehicles, Light duty works on standard diesel vehicles, and Auto works on standard vehicles.”
- “Most of the heavy duty vehicles you work on are semi-trucks, there is not much opportunity to work on construction or farm equipment.”

### **Contacting Admissions**

If you have any questions about the Automotive Technology program, or the application process we would be happy to go over it with you.

#### To schedule an appointment

Student Affairs

Room #311

Phone: 208-535-3000

#### Admissions Counselor

Courtney Richert

Phone: 208-535-5610

Email: [Courtney.Richert@cei.edu](mailto:Courtney.Richert@cei.edu)

#### Program Specific Questions

Kent Berggren

Phone: 208-535-5373

Email: [Kent.Berggren@cei.edu](mailto:Kent.Berggren@cei.edu)

#### Auto Specific Questions

Bill Swenson

Phone: 208-535-5356

Email: [Bill.Swenson@cei.edu](mailto:Bill.Swenson@cei.edu)

## Program Cost

*Costs are subject to change.*

### Associates of Applied Science

AT. AAS Tuition	
Semester 1	\$1,935.00
Semester 2	\$1,935.00
Semester 3	\$1,548.00
Semester 4	\$1,548.00
Gen Ed	\$1,935.00
	<b>\$8,901.00</b>

AT. AAS Books	
Semester 1	\$215.00
Semester 2	\$0.00
Semester 3	\$200.00
Semester 4	\$0.00
Gen Ed	\$300.00
	<b>\$715.00</b>

AT. AAS Fees and Supplies	
Coverall	\$220.00
Supply Fee	\$25.00
TSA Exam	\$30.00
Certification	\$35.00
Tools	\$4,000.00
	<b>\$4,310.00</b>

Totals	
Tuition	\$8,901.00
Books	\$715.00
Fees/Tools	\$4,310.00
	<b>\$13,926.00</b>

### Advanced Technical Certificate

AT. ATC Tuition	
Semester 1	\$1,935.00
Semester 2	\$1,935.00
Semester 3	\$1,548.00
Semester 4	\$1,548.00
	<b>\$6,966.00</b>

AT. ATC Books	
Semester 1	\$215.00
Semester 2	\$0.00
Semester 3	\$200.00
Semester 4	\$0.00
	<b>\$415.00</b>

AT. ATC Fees and Supplies	
Coverall	\$220.00
Supply Fee	\$25.00
TSA Exam	\$30.00
Certification	\$35.00
Tools	\$4,000.00
	<b>\$4,310.00</b>

Totals	
Tuition	\$6,966.00
Books	\$415.00
Fees/Tools	\$4,310.00
	<b>\$11,691.00</b>

### Intermediate Technical Certificate

AT. ITC Tuition	
Semester 1	\$1,935.00
Semester 2	\$1,935.00
	<b>\$3,870.00</b>

AT. ITC Books	
Semester 1	\$215.00
Semester 2	\$0.00
	<b>\$215.00</b>

AT. ITC Fees and Supplies	
Coverall	\$110.00
Supply Fee	\$25.00
TSA Exam	\$30.00
Certification	\$35.00
Tools	\$4,000.00
	<b>\$4,200.00</b>

Totals	
Tuition	\$3,870.00
Books	\$215.00
Fees/Tools	\$4,200.00
	<b>\$8,285.00</b>

## Program Course List

*Bold indicates general education courses and can be taken during any semester.*

**Automotive Technology**  
Associate of Applied Science (AAS)  
69 Credits / Financial Aid Eligible

**Fall Semester 1**

Course	Course Name	Credits
ASE 114	Engine Repair	3
ASE 133	Manual Drive-Train	2
ASE 164	Intro to Electrical	1
ASE 165	Electrical Systems	3
ASE 173	Automotive/Diesel Basic HVAC	2
MTD 103	Auto Diesel Tech Fundamentals & Safety	2
MTD 110	Mechanics Technical Math	2

**Spring Semester 2**

Course	Course Name	Credits
ASE 102	Workshop Technical Skills	3
ASE 103	Automotive Theory I	6
ASE 101L	Automotive Lab I	6

**Fall Semester 3**

Course	Course Name	Credits
ASE 203	Automotive Theory II	6
ASE 201L	Automotive Lab II	6

**Spring Semester 4**

Course	Course Name	Credits
ASE 204L	Automotive Theory III	6
ASE 204L	Automotive Lab III	6

**Required General Education Courses**  
*It is recommended students take these courses before or after the program, not during.*

Course	Course Name	Credits
COMA 101	Fundamentals of Oral Communication	3
ENGL 101	Writing and Rhetoric I	3
MATH 123	Mathematics in Modern Society	3
	Any General Education Elective	3
	<i>Choose One of the Following</i>	
PSYC 101	Introduction to Psychology	3
SOC 101	Introduction to Sociology	3

**Automotive Tech**  
**Advanced Technical Certificate (ATC)**  
54 Credits / Financial Aid Eligible

**Fall Semester 1**

Course	Course Name	Credits
ASE 114	Engine Repair	3
ASE 133	Manual Drive-Train	2
ASE 164	Intro to Electrical	1
ASE 165	Electrical Systems	3
ASE 173	Automotive/Diesel Basic HVAC	2
MTD 103	Auto Diesel Tech Fundamentals & Safety	2
MTD 110	Mechanics Technical Math	2

**Spring Semester 2**

Course	Course Name	Credits
ASE 102	Workshop Technical Skills	3
ASE 103	Automotive Theory I	6
ASE 101L	Automotive Lab I	6

**Fall Semester 3**

Course	Course Name	Credits
ASE 203	Automotive Theory II	6
ASE 201L	Automotive Lab II	6

**Spring Semester 4**

Course	Course Name	Credits
ASE 204	Automotive Theory III	6
ASE 204L	Automotive Lab III	6

**Automotive Tech**  
**Intermediate Technical Certificate (ITC)**  
30 Credits / Financial Aid Eligible

**Fall Semester 1**

Course	Course Name	Credits
ASE 114	Engine Repair	3
ASE 133	Manual Drive-Train	2
ASE 164	Intro to Electrical	1
ASE 165	Electrical Systems	3
ASE 166	Automotive/Diesel Basic HVAC	2
MTD 103	Auto Diesel Tech Fundamentals & Safety	2
MTD 110	Mechanics Technical Math	2

**Spring Semester 2**

Course	Course Name	Credits
ASE 102	Workshop Technical Skills	3
ASE 103	Automotive Theory I	6
ASE 101L	Automotive Lab I	6

## AT & LDD Student Tool List

*The following is a generic list of the tools required for the automotive program. It is important that students begin their professional repair career by purchasing “professional mechanic grade tools”. Questions regarding the suitability of specific tools should be directed to your individual instructor.*

### **As a minimum each student will need the following items.**

(\* equal to or better)

#### **1<sup>st</sup> Year**

1. Safety glasses/goggles
2. Four drawer tool cart with locking device and key (\*)
3. 1/4” Drive socket set consisting of the following:
  - 6 point Metric shallow and deep well: 4mm-15mm
  - Extensions 2”, 6” and 10”
  - Ratchet 45 tooth, 5” long reversible (\*)
  - 1/4” drive universal
  - 1/4” drive nut driver handle
4. 3/8” Drive socket set, consisting of the following:
  - Spark Plug sockets 9/16, 5/8, and 13/16
  - 6 point shallow and deep well metric sockets 8mm thru 21mm
  - Flex sockets: 10mm, 11mm, 12mm, 13mm, 14mm, 15mm, 16mm, 17mm, 18mm, and 19mm
  - Extensions 1”, 3”, 6”, 9”, 12” and 18”
  - 3/8” drive universal
  - Ratchet 45 tooth, 8”long reversible (\*)
5. 1/2” Drive socket set consisting of the following:
  - 6 point shallow and deep metric sockets: 10mm-27mm
  - Extensions 2, 3, 6, and 10”
  - Ratchet 45 tooth, 11” reversible; (\*)
  - 1/2” Breaker bar/flex handle (16”minimum)
  - 1/2” drive universal
6. SAE and Metric combination wrenches in the following sizes; 1/4”-1 1/4” in 1/16<sup>th</sup> increments and 7mm thru 27mm.
7. SAE and Metric Tubing/line wrenches 3/8” thru 13/16”and **9mm thru 24mm**
8. Adjustable wrenches: 8” & 12”
9. Hammers:
  - Slim line compo thane hammer (\*),
  - Dead blow head (1-1/2 # 12” handle)
  - 3# Sledge Hammer (\*)
  - 16 oz. Ball peen
10. Pliers:
  - 6” combination slip-joint pliers: 1” maximum jaw opening, 1-1/4” jaw throat depth (\*);
  - 7”diagonal cutting pliers (side cutter), rubber grips (\*);
  - 7” needle nose pliers with rubber grip, 2-5/8 jaw depth (\*);
  - 10” Rib lock pliers (water pump) 5adjustment, 1-1/2” capacity (\*);
  - 10” lever jaw wrench pliers (vise grip) 2 straight jaws (\*)
  - 6” lever jaw wrench pliers (vise grip) 2 curved jaws (\*)
  - 6” lever jaw needle nose pliers (vise grip) (\*)
  - Wire stripper/crimper tool
11. Screwdrivers with shatterproof handles:

Flat blade: 6" round shank, 4" square shank, 6" square shank, 1-3/4" stubby, 1/8 x 2" pocket  
Phillips: #1 3" long, #2 6" long, #2 stubby  
Torx screwdrivers (T8-T40)

**12. Torx bit sockets:**

T6 – T60

E4 – E18

13. Hex key sets 1/16" thru 3/8" and 1.5mm thru 10mm

14. Chisels and Punches:

Cold chisels: 7/16 x 5-1/2" 5/8 x 6-1/2";

Pin punches 1/8, x 4-7/8, 5/32 x 5-1/8, 1/4 x 5-7/8, 5/16 x 1;

Center punch 3/8 x 1

15. Flat file- 10" mill bastard, with shatter-proof handle

16. Torque Wrenches:

3/8 dr. 5-75 ft-lbs

1/2" drive 25-250 ft-lbs

17. Prybars:

15" pry bar (lady slipper or rolling head style)

12" pry bar with shatter proof handle

18" pry bar with shatter proof handle

24" pry bar with shatter proof handle

36" pry bar with shatterproof handle

**18. Fluke Meter MT 87 (\*)**

19. Master feeler gauge from .0015' to .035: 25 blades approximately 3-5/16 x 1/2" and Brass feeler gauges .008" - .035"

20. Deluxe adjustable hacksaw, 12" blade minimum

21. Oil filter wrenches or belt type (\*)

22. Continuity test light, 12 volt with 2' lead and alligator ground clamp (\*)

23. Gasket Scraper

24. Magnetic pick up tool

**25. 4 piece pick set**

26. Air blow gun-lever type safety blow gun, with rubber tipped nozzle

27. Tire inflator

28. Mechanics Mirror

29. Drop light/flashlight (corded or cordless)

30. Spark plug gapping tool

31. Battery service tool kit

32. 0-6" dial caliper

33. 10 ft. Steel tape rule, with locking blades and automatic rewind, at least 1/2" wide (\*)

34. Wire brush (hand held) 10" length wood handle(\*)

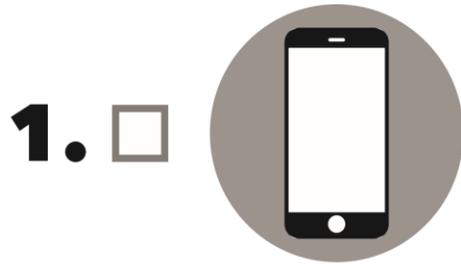
## **SUGGESTED SECOND YEAR TOOL LIST**

*\*Optional\**

1. 45"x 38"x 22" roll-away with 5" casters, complete with locking device and key (\*)
2. 22" x 38" x 22" Top box tool chest with locking device and key (\*)
3. 1/4" socket set consisting of the following: 6 and 12 point SAE shallow and deep well: 3/16-9/16, 12 point Metric shallow and deep well: 4mm-15mm
4. 3/8" socket set, consisting of the following: 6and 12 point shallow and deep well sockets: 5/16"-1" in 16<sup>th</sup> increments, 3/8" 12 point shallow and deep well metric sockets 8mm thru 21mm
5. 3/8" SAE impact socket 6 point 5/16" thru 1", metric impact socket set 6 point 8mm thru 21mm
6. 3/8" wobble impact socket sets in both SAE and Metric sizes 3/8 to 3/4 and 10mm to 19mm
7. 3/8" impact extensions 3", 6" and 12"
8. 3/8" and 1/2" drive impact universals
9. 3/8" to 1/2" impact adapter

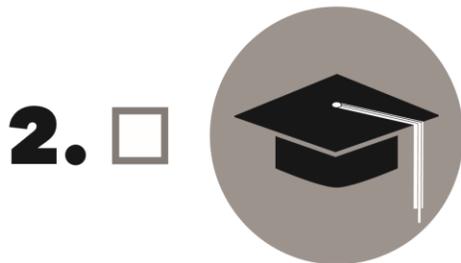
10. 1/2" socket set consisting of the following: 6 and 12 point shallow and deep well SAE sockets: 7/16"- 1 1/4 ", 12 point shallow and deep metric sockets: 10mm-27mm
11. 1/2" SAE impact socket set 6 point 7/16 thru 1 1/4, metric impact socket 6 point 10mm thru 27mm
12. 1/2" impact extensions 3",6" and 12"
13. 1/2"Drive 24" long breaker bar
14. 1/2" to 3/8" impact adapter
15. Impact axle nut sockets 28-36 mm
16. 4X4 axle nut sockets
17. O2 sensor socket set
18. Air Hammer
19. Air Hammer assorted chisel/punch attachments
20. Pickle Fork/ Taper Breaker
21. 1/2" air and/or cordless impact wrench minimum 750 ft-lbs. Torque at 90 PSI
22. 3/8" air and/or cordless ratchet
23. 3/8" air and/or cordless pistol grip impact
24. Corded/cordless/air 3/8" chuck drill and drill bits thru 1/2 inch
25. Impact Driver
26. Metric & SAE combination Gear Wrench sets(3/8"-3/4", 8mm-25mm)
27. OBD II code reader (\*)
28. 0-1" micrometer (\*)
29. Gear puller set
30. Universal harmonic balancer puller (\*)
31. Pitman Arm Puller
32. Snap ring plier set (internal and external)
33. Compression tester (\* "LDD" with adapters for diesel engines \*)
34. Spark tester (adjustable gap)
35. Vacuum tester/brake bleeder kit (hand pump type)
36. Brake tool set (spring release/install tools and spoons)
37. Brake Caliper Piston Compressor
38. Adjustable mirror with light
39. Tap and die set standard and metric
40. Bolt extractors
41. Serpentine belt installation tool
42. AC/Fuel line disconnect set
43. Line clamp set
44. Fuel pressure gauge
45. Radiator pressure tester

# APPLY TO College of Eastern Idaho **IN 4 STEPS!**



## Fill Out the Application

Apply online at [cei.edu](http://cei.edu)



## Give Us Your Transcripts

Have your high school or school district office email your Official Transcripts to [admissions@cei.edu](mailto:admissions@cei.edu)

**OR** request your GED from [diplomasender.com](http://diplomasender.com)

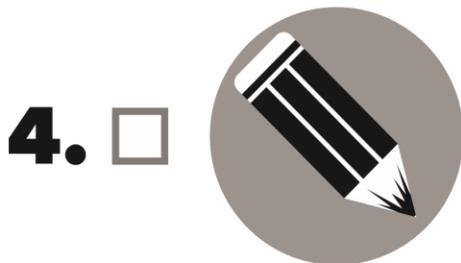


## Have You Gone to Other Colleges?

Contact each college or university you have attended and request all Official Transcripts be sent to CEI

Email: [admissions@cei.edu](mailto:admissions@cei.edu)

Fax: **208.525.5026**, Att. Sandy Bland



## Submit English & Math Placement Scores

ACT/SAT scores within the last five years,  
**OR** a placement test at CEI

**Call the Testing Center: 208.535.5438** *Refer to catalog for acceptable placement options and program-specific requirements.*



## Apply for Scholarships & Financial Aid

Apply yearly!

The CEI Scholarship deadline for the 2019-2020 year ends on February 8th, 2019. [ceigiving.org/scholarship](http://ceigiving.org/scholarship)

Federal Student Aid resets each year. You can apply for grants and low-interest loans. [fafsa.ed.gov](http://fafsa.ed.gov)