

*Delaware*



*Department  
of Education*

Skilled and Technical Sciences

**Transportation,  
Distribution, & Logistics  
Cluster Standards**

Delaware Department of Education (DE DOE)  
 Skilled and Technical Sciences Standards  
 for  
**Aircraft Powerplant Technician**

Additional Teacher Requirements: Work experience and education that meets DE DOE certification requirements for Skilled and Technical Sciences teacher  
<http://regulations.delaware.gov/AdminCode/title14/1500> plus:

1. A current Federal Aviation Administration (FAA) Aircraft Powerplant License in good standing  
<http://www.faa.gov> .
2. A current Federal Aviation Administration (FAA) Aircraft Airframe License in good standing  
<http://www.faa.gov> .

For Delaware STS Teacher Certification, a current FAA Aircraft Powerplant License is equal to three Career-Related credits and a current FAA Aircraft Airframe License is equal to three Career-Related credits.

<b>Aircraft Powerplant Technician Pathway</b>					
509 CIP#	Classification of Instructional Programs (CIP) Name	Skill Level	Credits	Standard	End of Pathway Assessment
47.060821	Aircraft Powerplant Technology/Technician I	Foundational Skills	Minimum of 3	Minimum of 400 training hours in Sec. B 147.1 General Curriculum Subjects AND 750 training hours in Sec. D 147.1 Powerplant Curriculum Subjects from the Federal Aviation Administration's Regulations for Aviation Maintenance <a href="http://rgl.faa.gov">http://rgl.faa.gov</a>	Professional Aviation Maintenance Association (PAMA) Certification Test for Aviation Maintenance Specialist (AMS) <a href="http://www.pama.org">www.pama.org</a>
47.060822	Aircraft Powerplant Technology/Technician II	Intermediate Skills	Minimum of 3		
47.060823	Aircraft Powerplant Technology/Technician III	Employment-entry Skills, Cooperative Employment Opportunities, and Exam Preparation	Minimum of 2		

Delaware Department of Education (DE DOE)  
 Skilled and Technical Sciences Standards  
 for

**Automotive & Light/Medium Truck Diesel Technician**

Additional Teacher Requirements: Automotive and Diesel work experience and education that also meets DE DOE certification requirements for Skilled and Technical Sciences teacher  
<http://regulations.delaware.gov/AdminCode/title14/1500> plus:

Pre-requisite Certifications:

1. Current National Institute for Automotive Service Excellence’s ASE Master Automobile Technician Certification and individual certifications in all of the following areas [www.ASE.com](http://www.ASE.com):

- |   |  |
|---|--|
| A. Engine Repair (Test A1)                    | E. Brakes (Test A5)                        |
| B. Automatic Transmission/Transaxle (Test A2) | F. Electrical/Electronic Systems (Test A6) |
| C. Manual Drivetrain and Axles (Test A3)      | G. Heating and Air Conditioning (Test A7)  |
| D. Suspension and Steering (Test A4)          | H. Engine Performance (Test A8)            |
|   | I. Light Vehicle Diesel Engines (Test A9)  |

Certification Requirements:

1. National Automotive Technicians Education Foundation’s (NATEF) Certified Technician Training program requirements for instructors [www.NATEF.com](http://www.NATEF.com).

For Delaware STS Teacher Certification, ASE Master Automobile Technician Certification is equal to nine Career-Related credits.

<b>Automotive &amp; Light/Medium Truck Diesel Technician Pathway</b>					
509 CIP#	Classification of Instructional Programs (CIP) Name	Skill Level	Credits	Standard	End of Pathway Assessment
47.060520	Diesel Mechanics Technology/Technician Intro	Introductory Skills	1 Credit	National Automotive Technicians Education Foundation (NATEF) National Standards in the following Core Areas: 1. Suspension and Steering 2. Brakes 3. Electrical/Electronic Systems 4. Engine Performance <a href="http://www.natef.org">www.natef.org</a>  NOCTI Diesel Technology Test Code 4027 Specific Competencies and Skills. <a href="http://www.nocti.org">www.nocti.org</a>	Automotive Technician Standard (Test Code 4009) Job Ready Written Assessment from the National Occupational Competency Testing Institute (NOCTI)
47.060521	Diesel Mechanics Technology/Technician I	Foundational Skills	3 Credits		
47.060522	Diesel Mechanics Technology/Technician II	Intermediate Skills	3 Credits		
47.060523	Diesel Mechanics Technology/Technician III	Employment-entry Skills, Cooperative Employment Opportunities, and Exam(s) Preparation	3 Credits		

Delaware Department of Education (DE DOE)  
 Skilled and Technical Sciences Standards  
 for

**Automotive Mechanical Technician**

Additional Teacher Requirements: Work experience and education that meets DE DOE certification requirements for Skilled and Technical Sciences teacher  
<http://regulations.delaware.gov/AdminCode/title14/1500> plus:

Pre-requisite Certifications:

1. Current National Institute for Automotive Service Excellence’s ASE Master Automobile Technician Certification which includes individual certifications in all of the following areas [www.ase.com](http://www.ase.com):

- |   |  |
|---|--|
| A. Engine Repair (Test A1)                    | E. Brakes (Test A5)                        |
| B. Automatic Transmission/Transaxle (Test A2) | F. Electrical/Electronic Systems (Test A6) |
| C. Manual Drivetrain and Axles (Test A3)      | G. Heating and Air Conditioning (Test A7)  |
| D. Suspension and Steering (Test A4)          | H. Engine Performance (Test A8)            |

Certification Requirements:

1. National Automotive Technicians Education Foundation’s (NATEF) Certified Technician Training program requirements for automotive instructors [www.natef.com](http://www.natef.com).

For Delaware STS Teacher Certification, ASE Master Automobile Technician Certification is equal to nine Career-Related credits.

<b>Automotive Mechanical Technician Pathway</b>					
509 CIP#	Classification of Instructional Programs (CIP) Name	Skill Level	Credits	Standard	End of Pathway Assessment
47.060421	Automobile/Automotive Mechanical Technology/Technician I	Foundational Skills	Minimum of 2	National Automotive Technicians Education Foundation (NATEF)	Automotive Youth Educational Systems (AYES) Exit Exam <a href="http://www.ayes.org">www.ayes.org</a>  OR  Automotive Technician Standard (Test Code 4009) Job Ready Written Assessment from the National Occupational Competency Testing Institute (NOCTI) <a href="http://www.nocti.org">www.nocti.org</a>
47.060422	Automobile/Automotive Mechanical Technology/Technician II	Intermediate Skills	Minimum of 2	National Standards in the following Core Areas: 1. Suspension and Steering	
47.060423	Automobile/Automotive Mechanical Technology/Technician III	Employment-entry Skills, Cooperative Employment Opportunities, and Exam(s) Preparation	Minimum of 2	2. Brakes 3. Electrical/Electronic Systems 4. Engine Performance <a href="http://www.natef.org">www.natef.org</a>	

Delaware Department of Education (DE DOE)  
 Skilled and Technical Sciences Standards  
 for

**Autobody/Collision and Repair Technology/Technician**

Additional Teacher Requirements: Work experience and education that meets DE DOE certification requirements for Skilled and Technical Sciences teacher  
<http://regulations.delaware.gov/AdminCode/title14/1500> plus:

Pre-requisite Experience:

1. Prospective teachers must have a minimum of six years experience working in an auto body shop that includes experience in both damage repair AND painting/refinishing.

Pre-requisite Certification(s):

1. Current I-CAR Platinum Individual Certification [www.i-car.com](http://www.i-car.com) ; OR
2. Current National Institute for Automotive Service Excellence’s ASE Technician Certification which includes individual certifications in all of the following areas [www.ASE.com](http://www.ASE.com):

- |   |  |
|---|--|
| A. Painting and Refinishing (B2)                  | D. Mechanical and Electrical Components (B5) |
| B. Non-Structural Analysis and Damage Repair (B3) | E. Damage Analysis and Estimating (B6)       |
| C. Structural Analysis and Damage Repair (B4)     |  |

For Delaware STS Teacher Certification, I-CAR Platinum Individual Certification is equal to nine Career-Related credits. For Delaware STS Teacher Certification, ASE Technician Certifications in B2, B3, B4, B5, and B6 equal a combined total of nine Career-Related credits.

<b>Autobody/Collision and Repair Technology/Technician Pathway</b>					
509 CIP#	Classification of Instructional Programs (CIP) Name	Skill Level	Credits	Standard	End of Pathway Assessment
47.060321	Autobody/Collision and Repair Technology/Technician I	Foundational Skills	Minimum of 2	I-CAR Training Standards for:  1. Core Training 2. Non-Structural Repair I 3. Structural Repair I  4. Refinishing I & II 5. Mechanical Repair I 6. Estimating, Management, Appraisal I  <a href="http://www.i-car.com">www.i-car.com</a>	Collision Repair and Refinishing Technology (Test Code 2083) Job Ready Written Assessment from the National Occupational Competency Testing Institute (NOCTI) <a href="http://www.nocti.org">www.nocti.org</a>  OR  I-CAR Qualification Tests for all areas included in Delaware Standards <a href="http://www.i-car.com">www.i-car.com</a>
47.060322	Autobody/Collision and Repair Technology/Technician II	Intermediate Skills	Minimum of 2		
47.060323	Autobody/Collision and Repair Technology/Technician III	Employment-entry Skills, Cooperative Employment Opportunities, and Exam(s) Preparation	Minimum of 2		

Delaware Department of Education (DE DOE)  
Skilled and Technical Sciences Standards  
for

**Core Automotive Technology**

Additional Teacher Requirements: Teachers for this pathway will be certified as **STS Teacher of Automotive Mechanical Technician**, and must have work experience and education that meets DE DOE certification requirements for Skilled and Technical Sciences teacher  
<http://regulations.delaware.gov/AdminCode/title14/1500> plus:

Pre-requisite Certifications:

1. Current National Institute for Automotive Service Excellence’s ASE Master Automobile Technician Certification which includes individual certifications in all of the following areas [www.ase.com](http://www.ase.com):

- |   |  |
|---|--|
| A. Engine Repair (Test A1)                    | E. Brakes (Test A5)                        |
| B. Automatic Transmission/Transaxle (Test A2) | F. Electrical/Electronic Systems (Test A6) |
| C. Manual Drivetrain and Axles (Test A3)      | G. Heating and Air Conditioning (Test A7)  |
| D. Suspension and Steering (Test A4)          | H. Engine Performance (Test A8)            |

Certification Requirements:

1. National Automotive Technicians Education Foundation’s (NATEF) Certified Technician Training program requirements for automotive instructors [www.natef.com](http://www.natef.com).

For Delaware STS Teacher Certification, ASE Master Automobile Technician Certification is equal to nine Career-Related credits.

<b>Core Automotive Technology Pathway</b>					
509 CIP#	Classification of Instructional Programs (CIP) Name	Skill Level	Credits	Standard	End of Pathway Assessment
47.069920	Vehicle Maintenance and Repair Technologies, Other I	Introductory Skills	1 credit	Core Concepts of the National Automotive Technicians Education Foundation (NATEF) National Standards in the following Areas: 1. Suspension and Steering 2. Brakes 3. Electrical/Electronic Systems 4. Engine Performance <a href="http://www.natef.org">www.natef.org</a>	Automotive Technician Core (Test Code 4109) Job Ready Written Assessment from the National Occupational Competency Testing Institute (NOCTI) <a href="http://www.nocti.org">www.nocti.org</a>
47.069921	Vehicle Maintenance and Repair Technologies, Other II	Foundational Skills	1 credit		
47.069922	Vehicle Maintenance and Repair Technologies, Other III	Intermediate Skills	1 credit		
47.069923	Vehicle Maintenance and Repair Technologies, Other IV	Capstone Repair Skills (Optional)	1 credit		

Delaware Department of Education (DE DOE)  
 Skilled and Technical Sciences Standards  
 for

**Small Engine Mechanic and Repair Technology/Technician**

Additional Teacher Requirements: Work experience and education that meets DE DOE certification requirements for Skilled and Technical Sciences teacher  
<http://regulations.delaware.gov/AdminCode/title14/1500> plus:

Pre-requisite Certification: Current Equipment and Engine Training Council (EETC)/Outdoor Power Equipment (OPW) Certification ([www.eetc.org](http://www.eetc.org)) in “Four Stroke” and “Two Stroke” and at least one of the following areas:

1. Electrical
2. Compact Diesel
3. Driveline/Hydraulics/Hydrostatic

Equipment and Engine Training Council (EETC) Certification is in each of the above certification areas is equal to three Career-Related credits up to a maximum of nine Career-Related Credits.

<b>Small Engine Mechanic and Repair Technology/Technician Pathway</b>					
509 CIP#	Classification of Instructional Programs (CIP) Name	Skill Level	Credits	Standard	End of Pathway Assessment
47.060621	Small engine Mechanic and Repair Technology/Technician I	Foundational Skills	Minimum of 2	Program must be a Category 1, 2, 3, 4, & 5 Equipment and Engine Training Council (EETC) Accredited School using EETC Approved Textbooks in:  1. Two & Four Stroke Engines 2. Electrical  <a href="http://www.eetc.org">www.eetc.org</a>	Equipment and Engine Training Council (EETC) Four Stroke Certification Test  <a href="http://www.eetc.org">www.eetc.org</a>
47.060622	Small engine Mechanic and Repair Technology/Technician II	Intermediate Skills	Minimum of 2		
47.060623	Small engine Mechanic and Repair Technology/Technician III	Employment-entry Skills, Cooperative Employment Opportunities, and Exam Preparation	Minimum of 2		