

## CTE Course Description and Standards Crosswalk

### Course Information

Course Name	Small Engine Repair 1
Course Number	86610
Number of High School Credits	.5
Sequence or CTEPS (You must first have the Sequence or CTEPS entered into the EED-CTE system.)	Automotive Technology Marine Mechanics Outdoor Power Equipment
Date of district Course Revision	February 2015

### Career & Technical Student Organization (CTSO)

CTSO embedded in this sequence	SkillsUSA
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### Occupational Standards

Source of Occupational Standards	Equipment & Engine Training Council (EETC)
Names/Numbers of Occupational Standards	2-Stroke; 4-Stroke; Electrical

### Registration Information

Course Description (brief paragraph – as shown in your student handbook or course list)	Small Engines 1 covers the principles of small gasoline and diesel engines, safe working habits, employability skills and environmental concerns related to internal combustion. Knowledge of internal combustion engines and basic ignition sources is emphasized. Students interested in being a small engine mechanic or manager either in a small business or dealership would benefit from this class.
Instructional Topic Headings (please separate each heading by a semi-colon)	Lab Safety and Shop Procedures; Employability Skills; Engine Theory and Design; Fuel Systems; Emission and Environmental Concerns; Industry Performance Standards; Tools and Equipment; Electrical; Encourage Career and Technical Student Organization (CTSO) Involvement

### Summative Assessments and Standards

Technical Skills Assessment (TSA)	Yes
Course addresses:	EETC: 2-Stroke; 4-Stroke; Electrical
New Alaska ELA and Math Standards	Yes
Alaska Cultural Standards	Yes
All Aspects of Industry (AAI)	Yes
Core Technical Standards	Yes
Employability Standards	Yes

### Employability Standards

Source of Employability Standards	State of Alaska
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### Tech Prep

Current Tech Prep Articulation Agreement? (Y/N)	No
Date of Current Agreement	
Postsecondary Institution Name	
Postsecondary Course Name	
Postsecondary Course Number	
# of Postsecondary Credits	

### Additional CTE Course Information

Author	
Course developed by	Neal Lacy, John Egan, Revised by Tom Lord
Course adapted from	Small Engines 1
Date of previous course revision	June 2005
Course Delivery Model	
Is the course brokered through another institution or agency? (Y/N)	No

Standards Alignment
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Student Performance Standards (Learner Outcomes or Knowledge & Skill Statements)	Specific Occupational Skills Standard	Common Technical Core Standards	New Alaska ENG/LA Standards	New Alaska Math Standards	Alaska Cultural Standards	Employability/ Career Readiness Standards	All Aspects of Industry/ Systems	Assessment
Works safely and knows shop procedures.	100 101 102 103 104 201	CRP 3	RST.9-12.3; SL.9-12 1a-d		B2,4	A1,2,5,6	Management Technical Skills Health & Safety	EETC 2 & 4 cycle
Uses tools and equipment safely.	105 401 402 403 404 405 406	CRP 3	RST.9-12.3; SL.9-12 1a-d	NQ1	B2,4	A1,2,5,6	Technical Skills Health & Safety Technology	AK EED Safety Manual
Explain fuel and fuel systems.	104H1,H2,H3,H4,H5 104I,J	CRP 2, 7, 11	RST.9-12.1&4; SL.9-12.4	NQ 1,2,3; SMD 6,7	B2,4	A2,5	Technology	EETC 2 & 4 cycle
Explain electrical systems.	104F 104M1,2	CRP 2, 7,	RST.9-	NQ 1,2,3	B2,4	A2,5	Technolog	EETC 2 & 4 cycle

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<b>Student Performance Standards (Learner Outcomes or Knowledge &amp; Skill Statements)</b>	<b>Specific Occupational Skills Standard</b>	<b>Common Technical Core Standards</b>	<b>New Alaska ENG/LA Standards</b>	<b>New Alaska Math Standards</b>	<b>Alaska Cultural Standards</b>	<b>Employability/ Career Readiness Standards</b>	<b>All Aspects of Industry/ Systems</b>	<b>Assessment</b>
	104K	11	12.1&4; SL.9- 12.4				y	
Emission and environmental concerns.	104J1	CRP 2, 7, 11	A2,5	NQ 1,2,3; SIC 6; SMD 6,7	A4, B2,4	A2,5	Technolog y Communit y	EETC 2 & 4 cycle
Engine design and structure	104A	CRP 2, 7, 11	RST.9- 12.1&4; L 9-12.6	GGMD 1; GMG 1,2	B2,4	A2,5	Technolog y	EETC 2 & 4 cycle
Cooling and lubrication.	104E 104G	CRP 2, 7, 11	L 9-12.6	NQ 1,2,3; SMD 6,7	B2,4	A2,5	Technolog y	EETC 2 & 4 cycle
Engine overhaul/repair.	400 600A,B	CRP 2, 7, 11	RST 9- 12.1; RST 9- 12.3; L 9- 12.6	NQ 1,2,3; SIC 6	B2,4	A2,5	Technical Skills	EETC 2 & 4 cycle
Demonstrate Employability skills.		CRP 1, 6, 12	RST.9- 12.1&4; SL 9- 12.1 1 a- d		B2,3,4	A 1,2,3,5 B 1, 2,3,4,5	Technical Skills Labor Work Habits	SkillsUSA

**Instructional Resources**

**List the major instructional resources used for this course: (websites, textbooks, essential equipment, reference materials, supplies)**

**Recommended Text:** Small Gas Engines Author: Alfred Roth 10<sup>th</sup> Edition

**Resources:**

Assessments available for SkillsUSA

<http://www.skillsusa.org/contests.html>

AK EED Safety Manual:

<http://www.eed.state.ak.us/tls/CTE/docs/resources/safetymanual.pdf>

Kawasaki Education Material

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Alaska Department of Education and Early Development

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Polaris Education Material  
Yamaha Education Material