Small Gas Engines (SGE)
National AFNR Common Career Technical Core Standards Alignment

	Unit 1 – Safety and Expectations	Unit 2 – Engines	Unit 3 - Diagnostics
Career Ready Practices Content Standards			
1. Act as a responsible and contributing citizen and employee.	X	X	
2. Apply appropriate academic and technical skills.	X	X	X
3. Attend to personal health and financial well-being.			
4. Communicate clearly, effectively and with reason.	X	X	X
5. Consider the environmental, social, and economic impacts of decisions.	X		
6. Demonstrate creativity and innovation.	X		
7. Employ valid and reliable research strategies.			
8. Utilize critical thinking to make sense of problems and persevere in solving them.	X		
9. Model integrity, ethical leadership, and effective management.			
10. Plan education and career path aligned to personal goals.			
11. Use technology to enhance productivity.			
12. Work productively in teams while using cultural/global competence.			

	Unit 1 – Safety and Expectations	Unit 2 – Engines	Unit 3 - Diagnostics
Agriculture, Food, and Natural Resources Career Cluster			
1. Analyze how issues, trends, technologies and public policies impact systems in the Agriculture, Food & Natural Resources Career Cluster.	X		
2. Evaluate the nature and scope of the Agriculture, Food & Natural Resources Career Cluster and the role agriculture, food and natural resources (AFNR) play in society and the economy.			
3. Examine and summarize importance of health, safety, and environmental management systems in AFNR organizations.	X		
4. Demonstrate stewardship of natural resources in AFNR activities.			
5. Describe career opportunities and means to achieve those opportunities in each of the AFNR career pathways.			
6. Analyze the interaction among AFNR systems in the production, processing and management of food, fiber and fuel and the sustainable use of natural resources.			

Power, Structural, and Technical Pathway Content Standards			
1. Apply physical science principles and engineering applications related to mechanical equipment, structures, and biological systems to solve problems and improve performance in power, structural, and technical systems.		X	
2. Operate and maintain mechanical equipment related to AFNR power, structural, and technical systems.	X	X	X
3. Service and repair mechanical equipment and power systems used in power, structural, and technical systems.		X	X
4. Plan, build and maintain AFNR structures.			
5. Use control, monitoring, geospatial and other technologies in AFNR power, structural and technical systems.			