**VOCABULARY LIST- DEFINITIONS**

1. **Advanced Manufacturing -** a variety of activities that depend on the use andcoordination of information, automation, computation, software, sensing, and networking, and/or making use of cutting edge materials and emerging capabilities enabled by the physical and biological sciences; examples would be nanotechnology, chemistry and biology. Advanced Manufacturing involves both new ways to manufacture existing products, and especially the manufacture of new products emerging from new advanced technologies.
2. **Aerospace -** involves the design and manufacturing of aircraft, rockets, missiles,spacecraft, etc., that are needed to operate in aerospace
3. **Biotechnology –** the utilization of living organisms or other biological systems tomanufacture drugs or other products needed for environmental management; an example would be waste recycling where microorganisms are used to degrade a waste or oil spill
4. **Energy -** the many different forms of energy to power other industries, for example light,heat, mechanical, gravitational, electrical, sound, chemical, nuclear, etc.; often these different forms of energy transfer back and forth from each other
5. **Geospatial Technology –** utilization of a range of modern tools to perform geographicmapping and analysis of the Earth and human societies
6. **Information Technology -** development, implementation, and maintenance of computerhardware and/or software systems to organize and communicate information electronically
7. **Nanotechnology** –creation and/or use of technology that is on a scale of less than 100nanometers with a goal of controlling individual atoms and molecules, especially to create computer chips and other microscopic devices
8. **Robotics –** robotics careers include anything from a robotics engineer to a behind-the-scenes designer, who is responsible for creating robots and robotic systems that are able to perform duties that humans are either unable or prefer not to complete; robots can be created that help make jobs safer, easier, and more efficient, particularly in the manufacturing industry