

Pathway Summary Descriptions & Details for SAE Journals

Pathway in: Power, Structure and Technical Systems



Code	Summary Activity Description	AFNR Description	Additional AFNR Details
PST.01	Applying physical science and engineering principles	Applying physical science and engineering principles	Select energy sources in power generation appropriate to the situation.
			Apply physical science laws and principles to identify, classify and use lubricants.
			Identify and use hand and power tools and equipment for service, construction and fabrication.
PST.02	Operating and maintaining mechanical equipment or structures	Operating and maintaining mechanical equipment or structures	Perform service routines to maintain power units and equipment.
			Operate, service and diagnose the condition of power units and equipment.
PST.03	Servicing and repairing equipment	Servicing and repairing equipment	Troubleshoot and repair internal combustion engines.
			Utilize manufacturers' guidelines to service and repair the power transmission systems of equipment.
			Service and repair hydraulic and pneumatic systems.
			Troubleshoot and service electrical systems.
			Service vehicle heating and air-conditioning systems.
			Service and repair steering, suspension, traction and vehicle performance systems.
PST.04	Planning, building, and maintaining structures.	Planning, building, and maintaining structures.	Create sketches and plans of agricultural structures.
			Apply structural plans, specifications and building codes.
			Examine structural requirements for materials and procedures and estimate construction cost.
			Follow architectural and mechanical plans to construct and-or repair equipment, buildings and facilities.
PST.05	Applying technology to manage equipment or structures	Applying technology to manage equipment or structures	Use instruments and meters to test and monitor electrical and electronic processes.
			Prepare and-or use electrical drawings to design, install and troubleshoot control systems.
			Use geospatial technologies in agricultural applications.