# Course numbers with the # symbol included (e.g. #400) have not been taught in the last 3 years.

**AM #451 - Welding/Fabrication Technology**

**Credits:** 0 or 4

Processes and procedures of welding including: Shielded Metal Arc Welding (SMAW), Shielded Metal Arc Cutting (SMAC), Oxyacetylene Welding (OAW), Oxy-Fuel Gas Cutting (OFC-A), Gas Metal Arc Welding (GMAW), Plasma Arc Cutting (PAC), and Gas Tungsten Arc Welding (GTAW). Welding metallurgy and control of distortion. Special fee. Prereq: permission. 2 lec/2-hr rec.

_Equivalent(s):_ AM 251, AOE 451, EDUC 451

**AM 461 - Internal Combustion Engines I**

**Credits:** 0 or 4

Internal combustion engines (spark-ignited and diesel) and their subsystems with emphasis on their design, how they function, preventive maintenance, and troubleshooting. 2 lec/2-hr rec.

_Equivalent(s):_ AM 261, AOE 461, EDUC 461, VTAE 461

**AM #470 - Residential Electricity**

**Credits:** 0 or 2

Electrical principles, laws, and installation with emphasis on the "National Electrical Code." While modeled at the residential level, concepts and terminology will be applicable to the commercial and light industrial sectors as well. Concepts and methodologies will be supported with design and when appropriate, hands on application to enhance the learning environment. 2 lec/2-hr rec. (half semester course.)

_Equivalent(s):_ AM 270, AOE 470, EDUC 470, VTAE 470