1. Understand the physical properties and processes related to energy resources and the conversion technologies involved.

2. Understand how energy decisions are impacted by environmental, social, economic or political factors.

3. Synthesize knowledge of the technical/physical aspects of energy with the social/environmental factors to analyze how energy choices impact the sustainability of energy systems.

4. Apply interdisciplinary energy knowledge to analyze, design or solve a matter of real world significance related to sustainability of energy use.