

**EXPECTED LEARNING OUTCOMES (ELOs)
FOR M.S. in Petroleum and Energy Technology Program**

LOs of CU	ELOs of PL M.S. Program
1. Being knowledgeable	<ul style="list-style-type: none"> • being able to interpret terminology and schools of thought in an interdisciplinary specialist area of petroleum and energy • being able to combine current trend with technical topics related to petroleum and energy
2. Having morality and ethics	<ul style="list-style-type: none"> • taking the ecological, societal, social and ethical effects into account in their scientific activities • being able to quote correctly and appropriately
3. Having good judgement	<ul style="list-style-type: none"> • handling complex situations that require interdisciplinary cooperation
4. Having essential skills	<ul style="list-style-type: none"> • being able to design and operate processes related to petroleum refining and energy • assessing technical challenges regarding the issues related to polymer under given conditions and express a sound technical opinion • reflecting on their own work and use relevant information in their own activities continuously • having master communication and presentation techniques • being able to write scientific article • being flexible, able to adapt and to work in a term
5. Having inquisitive mind and being aware of learning methods	<ul style="list-style-type: none"> • exercise and inquisitive mind to conduct and learn from polymers-related researches with comprehensive viewpoints knowing

	for self-development and professional development
6. Having leadership qualities	<ul style="list-style-type: none"> • being able to understand, formulate and plan a task in an industrial and scientific environment and to present possible solutions • being able to take on leadership tasks
7. Maintaining wellness	<ul style="list-style-type: none"> • maintain wellness by balancing professional works and habits for good health and mindfulness to possess strong physical, mental, emotional and social health
8. Having voluntary-orientated mind and social awareness	<ul style="list-style-type: none"> • being able to act as a link between various specialist disciplines in an interdisciplinary environment • being able to use learning strategies that enable them to further develop their knowledge independently • being able to take the initiative
9. Maintaining Thai-ness in the world of globalization	<ul style="list-style-type: none"> • Maintaining and revitalizing Thainess in globalization by realizing our own identity and values and driving efforts to develop and carry out various polymer research and projects, based on the content serving needs of polymers and related industries and Thai people