Our Energy Systems Engineering (ERSE) program offers you a one-of-a-kind opportunity to study a comprehensive energy-related curriculum that is the first of its kind. Other programs under the title “Energy” mainly focus on sustainable energy engineering with limited additions of energy storage courses – the ERSE program offers the Petroleum Engineering, Sustainable Energy Engineering, and Energy Transportation and Storage options simultaneously. The **multidisciplinary curricula will allow you the flexibility of switching among the three options or graduate with the skills in more than one discipline** required in the energy industry.

**Energy Systems Engineering** is a new program that will be included in our next accreditation cycle with our other approved programs.

**PROGRAMS**
- Bachelor of Applied Science in Energy Systems Engineering
- Bachelor of Applied Science (Co-op) in Energy Systems Engineering
- Bachelor of Applied Science (Internship) in Energy Systems Engineering

**LEARN BY DOING!**
The ERSE program offers hands-on learning with real-world experience. Plus, you’ll have access to hands-on laboratories and the opportunity to make close connections with dedicated instructors.

**CO-OPERATIVE EDUCATION AND INTERNSHIPS**
*Earn while you learn!* As an ERSE student, Co-op work placements allow you to earn between $8,000 and $13,000 per semester while gaining valuable real-world experience. Plus, after completing the required number of work terms, your degree will have a co-op designation.

**HANDS-ON LABS**
- Crescent Point Petroleum Lab
- Future Sustainable Energy Lab

**RESEARCH AREAS**
During your studies, you’ll have the opportunity to participate in cutting-edge research.
WHAT IS THE DIFFERENCE BETWEEN THE THREE STREAMS OF ERSE?

• The Petroleum Engineering option focuses on exploiting oil and gas resources.
• The Sustainable Energy Engineering option focuses on developing and enhancing the required clean energy technology.
• The Energy Transportation and Storage option focuses on knowledge and skills of safe, clean, and energy-efficient transportation and storage.

POTENTIAL CAREERS:

Petroleum Engineering Career
• Exploration engineer
• Well logging engineer
• Petrophysicist
• Drilling engineer
• Completions engineer
• Mud engineer
• Reservoir engineer
• Simulation engineer
• Well testing engineer

Production engineer
Stimulation engineer
Operations engineer

Sustainable Energy Engineering Career
• Energy engineer
• Energy systems engineer
• Renewable energy project analyst

Renewable energy project engineer
Clean energy marketing analyst
Power engineer
Sustainability engineer
Field service engineer

Energy Transportation and Storage Career
• Transportation engineer
• Pipeline engineer

Pipeline integrity engineer
Pipeline project engineer
Energy storage system analyst
Process engineer
Refining engineer

As an Energy Systems Engineer, you could potentially make $127,845 per year*!


SYSTEMS APPROACH

Our Systems Engineering approach combines classes in areas such as business, economic, social, environmental, and professional awareness and focuses on the range of skills you need to be a professional engineer in the modern world. Combining the human elements of engineering with the technical side prepares you to work in the broader context of multi-disciplinary, team design approach.