

Energy Engineering Minor

Minor Requirements

Minimum Credits Required: 18

This minor can be completed with a single energy certificate approach or a two energy certificate approach.

Track - Single Energy Certificate Approach

| Code | Title | Credits |
|---|---|-----------|
| Required Course | | |
| ME 350 | Thermodynamics and Heat Transfer | 3 |
| or ME 351 | Thermodynamics I | |
| Select one Energy Certificate from the following: | | 9 |
| UG Cert Energy Engineering - Buildings | | |
| UG Cert Energy Engineering - Generation | | |
| UG Cert Energy Engineering - Vehicles | | |
| Complete two courses from the following: | | 6 |
| ABEN 444 | Transport Processes | |
| ABEN 452 | Bioenvironmental Systems Design | |
| ABEN 456 | Biobased Energy | |
| ABEN 473 | Agricultural Power | |
| ECE 431 | Power Systems | |
| ECE 432 | Computational Methods in Power Systems | |
| ECE 433 | Power Systems Design | |
| ME 469 | Energy Storage Technology | |
| ME 470 | Renewable Energy Technology | |
| ME 481 | Fundamentals of Energy Conversion | |
| ME 484 | Aerospace Propulsion | |
| ME 487 | Internal Combustion Engines | |
| ME 482 | Fuel Cell Science and Engineering | |
| ME 485 | Heating, Ventilation and Air Conditioning | |
| CM&E 431 | Sustainable Design and Construction | |
| ME 397 | Fe/Coop Ed/Internship ¹ | |
| or ABEN 496 | Field Experience | |
| or ECE 397 | Fe/Coop Ed/Internship | |
| Total Credits | | 18 |

Track - Two Certificate Approach

| Code | Title | Credits |
|--|-------|-----------|
| Complete two Energy Engineering Certificates | | 18 |
| UG Cert Energy Engineering - Generation | | |
| UG Cert Energy Engineering - Vehicles | | |
| UG Cert Energy Engineering - Buildings | | |
| Total Credits | | 18 |

¹ The company or co-op project must be energy or energy-related and should be related to the focus area of the certificate. Approved by the Energy Stewardship Professor is required. The co-op must meet the requirements for 'co-op as a technical elective.'

Program Notes

- Students must be aware of all course per-requisites for courses listed in this program.
- A course applied to one certificate cannot also count toward a second Energy Engineering certificate.