

Master of Engineering in Energy Engineering

Admission Requirements

The applicant must meet the School of Graduate Studies' current minimum general admission requirements as published in the graduate catalog.

1. B.S. degree in an engineering or related field. Students holding a B.S. degree in a science or other related field may be admitted to Qualified Status with an obligation to acquire a background engineering knowledge. The exact requirements will be determined on a case-by-case basis.
2. An overall undergraduate GPA of at least 2.50, or 3.00 for the last two years.
3. Graduate Record Examination General Test for those with undergraduate degrees from non-ABET accredited programs.
4. Satisfy the School of Graduate Studies' English Language Proficiency requirements as published in the graduate catalog.

Degree Requirements

1. A minimum of 30 credits of coursework, 14 credits must be from the required core courses, the remaining should be selected in collaboration with the student's advisor and approved by the program's graduate director.
2. At least one-half of the credits must be at or above the 500-level.
3. A maximum of nine semester credits may be transferred from another institution.
4. Preparation of a written independent study report approved by the faculty advisor.

Required Core Courses:

| Code | Title | Credits |
|------------------------|---|-----------|
| ENE 501 | Managing Energy Resources and Policy | 3 |
| ENE 510 | Energy Systems Engineering I | 3 |
| ENE 511 | Energy Systems Engineering II | 3 |
| ENE 530 or ENGR 554 | Applied Engineering Business Analysis Applied Project Management | 3 |
| ENE 997 | Independent Study Report | 2 |
| Total Credits | | 14 |

Elective Course Options:

| Code | Title | Credits |
|----------|------------------------------------|---------|
| ENE 512 | Energy Systems Optimization | 3 |
| ENE 522 | Energy Storage Systems I | 3 |
| ENE 523 | Energy Storage Systems II | 3 |
| ENE 533 | Project Dynamics Strategy Modeling | 3 |
| ENGR 556 | System Dynamics I | 3 |
| ENGR 558 | System Dynamics II | 3 |

Additional options should be selected in coordination with student's advisor and graduate program director. Students should consider taking an engineering seminar and/or special topics course for one credit to complement the two credit independent study report.

Combined Bachelor and Master's

Combined Bachelor's/Master's Program Admission Requirements

The intent of the combined BS/MENGR Energy Systems Engineering program is to allow qualified students to complete the requirements for both degrees in one year beyond that required to receive the engineering baccalaureate degree. All requirements for both degrees must be met, and up to six credits of

prior-approved graduate environmental engineering coursework, preferably at the 500-level, may be double-counted toward each of the two degrees.

UND students currently completing their junior year (90 credits) towards an undergraduate engineering degree may apply to the MENGR Energy Systems Engineering under combined admission. The following are minimum eligibility requirements:

1. Students must have completed a minimum of 90 credits, including credits earned from advanced placement and dual credit. Students must apply before completion of the undergraduate degree.
2. Transfer students with a minimum of 90 credits-whether from the transfer institution alone or in combination with UND credits-must have both an overall grade point average of 2.75 (based on a 4.00 scale) and 3.00 GPA average for all courses with an engineering prefix completed at the date of application and admission
3. Students must have a both an overall grade point average of 2.75 (based on a 4.00 scale) and 3.00 GPA average for all courses with an engineering prefix completed at the date of application and admission
4. Combined program applicants must submit the standard application to the School of Graduate Studies, the application fee, a personal statement, and transcripts.
5. Additionally, combined program applicants must submit a detailed Program of Study that describes the 6 credits of double counted courses, the courses that will be taken after being accepted into the combined program, the courses that will be taken before graduation from the Bachelor program, and the expected graduation date for each degree. The submitted program of study must be signed by the student, the student's undergraduate advisor, the student's graduate advisor, and the Graduate Program Director.

Accelerated Bachelor and Master's (ABM)

Accelerated Bachelor's/Master's (ABM) 5 Year Degree Program Admission Requirements

The ABM degree program allows exceptional undergraduate students at UND an opportunity to complete the requirements for both the bachelor's and master's degrees at an accelerated pace. All requirements for both degrees must be met, and these students may double count up to 12 graduate-level credits towards the requirements for both their Bachelor and the Master of Engineering in Energy Systems Engineering degree requirements. ABM students must obtain their Master of Engineering degree in Energy Systems Engineering within 12 months of completing the Bachelor degree, provided that the degree requirements can be completed in that timeframe.

High achieving high school students (GPA of at least 3.2/4.0 and an ACT score of 25 or higher) will initially be considered for "identified" status and become eligible for formal admission when they meet the same criteria that undergraduates must meet for admission into the ABM program. Admission is a competitive process. The following are minimum eligibility requirements:

1. Students must have completed a minimum of 60 credits, including credits earned from advanced placement and dual credit. Students must apply before completion of the undergraduate degree.
2. Transfer students with a minimum of 60 credits-whether from the transfer institution alone or in combination with UND credits-must have a minimum cumulative GPA of 3.2/4.0 at the time of admission to the ABM program.
3. Students must have a minimum cumulative GPA of 3.2/4.0 at UND at the time of admission into the ABM program.
4. ABM program applicants must submit the standard application to the School of Graduate Studies, the application fee, a personal statement, and transcripts.
5. Additionally, ABM program applicants must submit a detailed Program of Study that describes the 12 credits of double counted courses, the courses that will be taken after being accepted into the ABM program, the courses that will be taken before graduation from the Bachelor program, and the expected graduation date for each degree. The submitted program of study must be signed by the student, the student's undergraduate advisor, the student's graduate advisor, and the Graduate Program Director.