

Energy Systems Technology and Education Center

Overview

The Energy Systems Technology and Education Center (ESTEC) was formed as a public/private partnership between Idaho State University, Idaho National Laboratory, and Partners for Prosperity. Curriculum and laboratory resources have been developed with external funding and support from the US Department of Labor, National Science Foundation, Battelle Energy Alliance, and industry partners. ESTEC administers five (5) programs leading to certificates and degrees. Graduates enter the workforce with the precise skills required by the energy industry in a broad spectrum of electrical, oil, gas, renewable, nuclear, and allied manufacturing sectors.

Programs

Energy Systems Electrical Engineering Technology (<https://coursecat.isu.edu/undergraduate/technology/energysystemstechnologyandeducationcenter/energy-systems-electrical-engineering-technology/>)

Energy Systems Instrumentation Engineering Technology (<https://coursecat.isu.edu/undergraduate/technology/energysystemstechnologyandeducationcenter/energy-systems-instrumentation-engineering-technology/>)

Energy Systems Mechanical Engineering Technology (<https://coursecat.isu.edu/undergraduate/technology/energysystemstechnologyandeducationcenter/energy-systems-mechanical-engineering-technology/>)

Energy Systems Nuclear Operations Technology (<https://coursecat.isu.edu/undergraduate/technology/energysystemstechnologyandeducationcenter/energy-systems-nuclear-operations-technology/>)

Industrial Cybersecurity Engineering Technology (<https://coursecat.isu.edu/undergraduate/technology/energysystemstechnologyandeducationcenter/industrial-cybersecurity-engineering-technology/>)

Admission

Students must meet minimum admissions criteria for each specific program. Acceptance into ESTEC programs is based upon available openings. Students interested in an ESTEC program should understand that a felony criminal record may affect employability in the energy industry.

Entry into the Energy Systems Instrumentation Engineering Technology, Energy Systems Electrical Engineering Technology, and Industrial Controls Associate degree programs requires completion of: ESET 1100, ESET 1100L, ESET 1101, ESET 1101L, ESET 1102, ESET 1102L, ESET 1140; the first two years of the Electrical Apprenticeship AAS degree program; or instructor approval. Program degrees will be awarded concurrently with completion of the Electrical Apprenticeship degree requirements.

For all Energy Systems Engineering Technology programs, a student who has successfully completed ESET 1140, Applied Technical Intermediate Algebra, may enroll directly into an academic math course that requires MATH 1108 as a prerequisite.

Official articulation agreements have been established with post-secondary and secondary schools. Where these agreements exist, the specific block of training

(i.e., session/semester/year) will be accepted as equivalent to that taught at ISU and will count equally toward graduation.

Academic Requirements

Students are required to earn a grade of C- (1.7) or better in each ESET, INST, or CYBR prefixed course, a cumulative 2.0 Grade Point Average (GPA) to advance each semester, and an overall 2.0 GPA to earn an ESTEC degree or certificate. Students who fail to meet grade or GPA requirements must exit the program and make up the deficiency through advisor-approved methods. The student will then be allowed to repeat the course at the next available program opening. Specific information is available in the program's student handbook.

The courses listed in each program will be taught in sequential blocks of instruction. Students must register concurrently for the lab course associated with each theory course. For detailed program information, visit <https://www.isu.edu/estec/>, which leads to descriptions of each program in general, course descriptions, lists of course sequences, and the cost of books, tools, uniforms, fees, and other expenses.

Faculty (<https://coursecat.isu.edu/undergraduate/technology/energysystemstechnologyandeducationcenter/faculty/>)

CYBR Courses (<https://coursecat.isu.edu/undergraduate/allcourses/cybr/>)

ESET Courses (<https://coursecat.isu.edu/undergraduate/allcourses/eset/>)

INST Courses (<https://coursecat.isu.edu/undergraduate/allcourses/inst/>)