Bachelor of Science Degree in Interdisciplinary Studies - General Engineering Technology Major

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Ike Flory, Program Coordinator and Advisor

The IDS Bachelor of Science degree with a major in general engineering technology (GET) is designed for students with military training and education in mechanical or electrical engineering technology. Students obtain a concentration in electromechanical systems and a minor in engineering management. The degree program is included in the Navy College Program Distance Learning Partnership (NCPDLP), U.S. Air Force Associate to Baccalaureate Cooperative (ABC), Servicemembers Opportunity College (SOC), and Navy College Program for Afloat Education (NCPACE). The general engineering technology degree program is not accredited by the Engineering Technology Accreditation Commission of ABET.

To be eligible for the program, students must have earned 21 military credits related to electrical or mechanical engineering technology. These credits are required to declare the major and satisfy the technical base requirement.

General Education and Major Requirements

The following table details the required general education courses and major requirements. All of the upper-division (300/400 level) courses in the major are available by distance learning in multiple formats, making the program accessible from any location. No more than two classes, or six credits, may be counted for both the major and a minor.

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>CET 220</td>
<td></td>
<td>Strength of Materials</td>
</tr>
<tr>
<td>EET 350</td>
<td></td>
<td>Fundamentals of Electrical Technology</td>
</tr>
<tr>
<td>EET 360</td>
<td></td>
<td>Electrical Power and Machinery</td>
</tr>
<tr>
<td>EET 410</td>
<td></td>
<td>Communication Principles (CD-Rom only)</td>
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<tr>
<td>or EET 370T</td>
<td></td>
<td>Energy and the Environment</td>
</tr>
<tr>
<td>EET 415</td>
<td></td>
<td>Programmable Machine Controls (CD-Rom only)</td>
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<tr>
<td>or EET 363</td>
<td></td>
<td>Introduction to PLC</td>
</tr>
<tr>
<td>MET 300</td>
<td></td>
<td>Thermodynamics</td>
</tr>
<tr>
<td>MET 310</td>
<td></td>
<td>Dynamics</td>
</tr>
<tr>
<td>MET 330</td>
<td></td>
<td>Fluid Mechanics</td>
</tr>
<tr>
<td>Upper-Division General Education (minimum)</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>Free Electives</td>
<td>8-14</td>
<td></td>
</tr>
<tr>
<td>Total Hours</td>
<td>120-126</td>
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</table>

Electives

Elective courses may be needed to meet the minimum of 120 credits required for the degree.

Upper-Division General Education

The ENMA minor is recommended, but not required. Students may choose another minor or Option D (Two Upper-Division courses outside the College and not required by the major) to meet the requirement. Upper-Division General Education is automatically satisfied for students obtaining a second bachelor's degree.

Requirements for Graduation

Requirements for graduation include a minimum cumulative grade point average of 2.00 overall and in the major, 120 credit hours, which must include both a minimum of 30 credit hours overall and 12 credit hours of upper-level courses in the major program from Old Dominion University, completion of ENGL 110C, ENGL 211C or ENGL 221C or ENGL 231C, and the writing intensive (W) course in the major with a grade of C or better, and completion of Senior Assessment.

Four-Year Plan - IDS - General Engineering Technology Major - BS

(http://catalog.odu.edu/undergraduate/collegeofartsletters/interdisciplinarystudies/bs-ids---general-engineering-technology/ids-generalengtech-bs-fouryearplan)

This is a suggested curriculum plan to complete this degree program in four years. Please consult information in this Catalog, Degree Works, and your academic advisor for more specific information on course requirements for this degree.

INTERDISCIPLINARY STUDIES Courses

IDS 300W. Interdisciplinary Theory and Concepts. 3 Credits.

An examination of the history, concepts and application of interdisciplinary study. This course includes an analysis of similarities and differences in academic disciplines and the application of interdisciplinary approaches to a specific topic of study. This is a writing intensive course. Prerequisites: a grade of C or better in ENGL 211C, ENGL 221C or ENGL 231C.
IDS 307T. Digital Writing. 3 Credits.
This course introduces students to issues of writing in various digital
environments like web pages, email, blogs, wikis, and discussion boards.
It also introduces fundamentals of hypertext authoring, digital and
visual rhetoric, and image manipulation. Prerequisites: ENGL 110C and
ENGL 211C or ENGL 221C or ENGL 231C.

IDS 368. Internship in Interdisciplinary Studies. 1-6 Credits.
An opportunity to integrate service and applied learning experience with
interdisciplinary perspectives. Prerequisite: junior standing and permission
of individualized interdisciplinary studies program coordinator.

IDS 369. Internship in Conservation Leadership. 3-6 Credits.
As part of the Conservation Leadership minor, this graded internship will
provide an opportunity to integrate service and applied learning experience
with interdisciplinary perspectives. 200 hours are required for the 3-credit
option, and 400 hours are required for the 6-credit option. Prerequisites:
BIOL 466W/OEAS 466W/IDS 466W and BIOL 467/OEAS 467/IDS 467.

IDS 397. Independent Study. 1-6 Credits.

IDS 398. Independent Study. 1-6 Credits.

IDS 400/500. Study Abroad. 0 Credits.

IDS 466W. Introduction to Mitigation and Adaptation Studies. 3
Credits.
Students will be introduced to the science underpinning mitigation of
human-induced changes in the Earth system, including but not limited
to climate change and sea level rise, and adaptation to the impacts of
these changes. The course will cover the environmental hazards and the
opportunities and limitations for conservation, mitigation and adaptation.
This is a writing intensive course. Cross listed with BIOL 466W and
OEAS 466W. Prerequisites: BIOL 291 or permission of instructor.

IDS 467. Sustainability Leadership. 3 Credits.
In this class, students will discover what makes a leader for sustainability.
They will consider a range of global and local crises from a leadership
point of view in the context of sustainability science, which addresses the
development of communities in a rapidly changing social, economic, and
environmental system-of-systems environment. The course will be based on
taking a problem-motivated and solution-focused approach to the challenges
considered. The course includes a service learning project focusing on
a leadership experience in solving a real-world environmental problem.
Prerequisite: BIOL 466W or OEAS 466W or IDS 466W.

IDS 469. IDS Electronic Portfolio Project. 3 Credits.
The preparation of an electronic portfolio integrating the student's academic
study, work experiences, skill identification and work products. Alternative
formats are used for varying uses of the portfolio. Prerequisites: IDS 300W
or permission of the instructor and senior standing.

IDS 494. Entrepreneurship in Interdisciplinary Studies. 3 Credits.
This course is designed to help students enhance their personal and
professional development through innovation guided by faculty members
and professionals. It offers students an opportunity to integrate disciplinary
theory and knowledge through developing a nonprofit program,
product, business, or other initiative. The real-world experiences that
entrepreneurships provide will help students understand how academic
knowledge leads to transformations, innovations, and solutions to different
types of problems. Prerequisite: IDS 300W and approval of the program
coordinator.

IDS 495. Topics in Integrative Studies. 3 Credits.
A focused study of selected topics linking perspectives, research and
applications from a variety of disciplines. Emphasis is on disciplinary
synthesis. Prerequisite: IDS 300W.

IDS 497. IDS Individualized Senior Project. 3 Credits.
This course is a vehicle for the execution of the senior project requirement
of the Interdisciplinary Studies Program. The project will be negotiated
between the student, faculty sponsors, and the program. Open only to
individualized integrative studies majors. Prerequisites: IDS 300W,
permission of the instructor and an approved individualized integrative
studies curriculum plan.