

# ENERGY BUSINESS AND FINANCE, B.S.

**Begin Campus:** Any Penn State Campus

**End Campus:** University Park

## Degree Requirements

For the Bachelor of Science degree in Energy Business and Finance, a minimum of 120 credits is required:

Requirement	Credits
General Education	45
Electives	11-19
Requirements for the Major	84-85

21-28 of the 45 credits of General Education are included in the Requirements for the Major. This includes: 0-7 credits of GN courses, 6 credits of GQ courses, and 6 credits of GS courses, 9 credits of GWS courses.

### Requirements for the Major

To graduate, a student enrolled in the major must earn a grade of C or better in each course designated by the major as a C-required course, as specified by Senate Policy 82-44 (<https://senate.psu.edu/students/policies-and-rules-for-undergraduate-students/82-00-and-83-00-degree-requirements/>).

Code	Title	Credits
<b>Prescribed Courses</b>		
ACCTG 211	Financial and Managerial Accounting for Decision Making	4
EBF 473	Risk Management in Energy Industries	3
ECON 104	Introductory Macroeconomic Analysis and Policy	3
<i>Prescribed Courses: Require a grade of C or better</i>		
EBF 200	Introduction to Energy and Earth Sciences Economics	3
EBF 301	Global Finance for the Earth, Energy, and Materials Industries	3
EBF 401	Strategic Corporate Finance for the Earth, Energy, and Materials Industries	3
EBF 483	Introduction to Electricity Markets	3
EBF 484	Energy Economics	3
ECON 102	Introductory Microeconomic Analysis and Policy	3
ECON 302	Intermediate Microeconomic Analysis	3
EME 460	Geo-resource Evaluation and Investment Analysis	3
EMSC 100S	Earth and Mineral Sciences First-Year Seminar <sup>1</sup>	3
MATH 140	Calculus With Analytic Geometry I	4
MATH 141	Calculus with Analytic Geometry II	4
RM 302	Risk and Insurance	3
<b>Additional Courses</b>		
EGEE 120	Oil: International Evolution	3
or IB 303	International Business Operations	
Select 3 credits from the following: 3		
CMPS 101	Introduction to Programming	

CMPS 200	Programming for Engineers with MATLAB	
CMPS 201	Programming for Engineers with C++	
Select 3 credits from the following: 3		
BA 243	Social, Legal, and Ethical Environment of Business	
BLAW 243	Legal Environment of Business	
ERM 411	Legal Aspects of Resource Management	
Select 6 credits from the following: 6		
EGEE 401	Energy in a Changing World	
EME 444	Global Energy Enterprise	
METEO 469	From Meteorology to Mitigation: Understanding Global Warming	
<i>Additional Courses: Require a grade of C or better</i>		
EBF 304W	Management for the Energy and Resource Industries	3
or EBF 404W	The Great Energy Transition: Law, Economics, and New Frontiers	
EME 210	Data Analytics for Energy Systems	3
or STAT 401	Experimental Methods	
ENGL 202C	Effective Writing: Technical Writing	3
or ENGL 202D	Effective Writing: Business Writing	
Select 3 credits from the following: 3		
ENGL 15	Rhetoric and Composition	
ENGL 30H	Honors Rhetoric and Composition	
ENGL 137H	Rhetoric and Civic Life I	
ESL 15	ESL Composition for American Academic Communication II	

### Supporting Courses and Related Areas

Select 6-7 credits of Introductory Electives from an approved list in consultation with an adviser. Students who complete Basic ROTC may substitute 6 credits of ROTC for 3 credits of GHW courses and 3 credits of Introductory Electives. 6-7

Select 3 credits of Advanced Electives from an approved list in consultation with an adviser. 3

<sup>1</sup> The following substitutions are allowed for students attending campuses where the indicated course is not offered: CAS 100 (<https://bulletins.psu.edu/search/?P=CAS%20100>) can be substituted for EMSC 100S (<https://bulletins.psu.edu/search/?P=EMSC%20100S>).

### General Education

Connecting career and curiosity, the General Education curriculum provides the opportunity for students to acquire transferable skills necessary to be successful in the future and to thrive while living in interconnected contexts. General Education aids students in developing intellectual curiosity, a strengthened ability to think, and a deeper sense of aesthetic appreciation. These are requirements for all baccalaureate students and are often partially incorporated into the requirements of a program. For additional information, see the General Education Requirements (<https://bulletins.psu.edu/undergraduate/general-education/baccalaureate-degree-general-education-program/>) section of the Bulletin and consult your academic adviser.

The keystone symbol appears next to the title of any course that is designated as a General Education course. Program requirements may also satisfy General Education requirements and vary for each program.

**Foundations (grade of C or better is required and Inter-Domain courses do not meet this requirement.)**

- **Quantification (GQ):** 6 credits
- **Writing and Speaking (GWS):** 9 credits

**Breadth in the Knowledge Domains (Inter-Domain courses do not meet this requirement.)**

- **Arts (GA):** 3 credits
- **Health and Wellness (GHW):** 3 credits
- **Humanities (GH):** 3 credits
- **Social and Behavioral Sciences (GS):** 3 credits
- **Natural Sciences (GN):** 3 credits

**Integrative Studies**

- **Inter-Domain Courses (Inter-Domain):** 6 credits

**Exploration**

- **GN**, may be completed with Inter-Domain courses: 3 credits
- **GA, GH, GN, GS, Inter-Domain courses.** This may include 3 credits of World Language course work beyond the 12th credit level or the requirements for the student's degree program, whichever is higher: 6 credits

**University Degree Requirements**

**First Year Engagement**

All students enrolled in a college or the Division of Undergraduate Studies at University Park, and the World Campus are required to take 1 to 3 credits of the First-Year Seminar, as specified by their college First-Year Engagement Plan.

Other Penn State colleges and campuses may require the First-Year Seminar; colleges and campuses that do not require a First-Year Seminar provide students with a first-year engagement experience.

First-year baccalaureate students entering Penn State should consult their academic adviser for these requirements.

**Cultures Requirement**

6 credits are required and may satisfy other requirements

- United States Cultures: 3 credits
- International Cultures: 3 credits

**Writing Across the Curriculum**

3 credits required from the college of graduation and likely prescribed as part of major requirements.

**Total Minimum Credits**

A minimum of 120 degree credits must be earned for a baccalaureate degree. The requirements for some programs may exceed 120 credits. Students should consult with their college or department adviser for information on specific credit requirements.

**Quality of Work**

Candidates must complete the degree requirements for their major and earn at least a 2.00 grade-point average for all courses completed within their degree program.

**Limitations on Source and Time for Credit Acquisition**

The college dean or campus chancellor and program faculty may require up to 24 credits of course work in the major to be taken at the location or in the college or program where the degree is earned. Credit used toward degree programs may need to be earned from a particular source or

within time constraints (see Senate Policy 83-80 (<https://senate.psu.edu/students/policies-and-rules-for-undergraduate-students/82-00-and-83-00-degree-requirements/>)). For more information, check the Suggested Academic Plan for your intended program.