# ENERGY BUSINESS AND <br> FINANCE, B.S. 

Begin Campus: Any Penn State Campus
End Campus: University Park

## Suggested Academic Plan

The suggested academic plan(s) listed on this page are the plan(s) that are in effect during the 2023-24 academic year. To access previous years' suggested academic plans, please visit the archive (https:// bulletins.psu.edu/undergraduate/archive/) to view the appropriate Undergraduate Bulletin edition (Note: the archive only contains suggested academic plans beginning with the 2018-19 edition of the Undergraduate Bulletin).

## General Option With Minor: Energy Business and Finance, B.S. at University Park Campus

The course series listed below provides only one of the many possible ways to move through this curriculum. The University may make changes in policies, procedures, educational offerings, and requirements at any time. This plan should be used in conjunction with your degree audit (accessible in LionPATH as either an Academic Requirements or What If report). Please consult with a Penn State academic adviser on a regular basis to develop and refine an academic plan that is appropriate for you.

## First Year

| Fall | Credits Spring | Credits |
| :---: | :---: | :---: |
| MATH 140 or 140G (GQ) ${ }^{\text {*\#\#† }}$ | 4 MATH 141 or 141 G (GQ) ${ }^{\star \ddagger \# \dagger}$ | 4 |
| ECON 102 (GS)*\#† | 3 ENGL 15, 30H, or ESL 15 $(\mathrm{GWS})^{\ddagger \dagger}$ | 3 |
| EMSC 100S, 100, CAS 100A, CAS 100B, or CAS 100C $(G W S)^{\ddagger+1}$ | 3 EBF 200* | 3 |
| General Education Knowledge Domain | 3 Introductory Level Elective ${ }^{2}$ | 3-4 |
| Introductory Level Elective ${ }^{2}$ | 3 Minor/Concurrent Major Course ${ }^{3}$ | 3 |
|  | 16 | 16-17 |
| Second Year |  |  |
| Fall | Credits Spring | Credits |
| ECON 104 (GS) ${ }^{\dagger}$ | 3 ACCTG 211 | 4 |
| ECON 302* | 3 EME 210 or STAT 401* | 3 |
| EBF 301* | 3 General Education Knowledge Domain | 3 |
| CMPSC 101, 200, or 201 | 3 General Education Knowledge Domain | 3 |
| Minor/Concurrent Major Course ${ }^{3}$ | 3 Minor/Concurrent Major Course ${ }^{3}$ | 3 |

15
16
Third Year

| Fall | Credits Spring | Credits |
| :--- | :---: | ---: |
| RM 302* | 3 EME 460* | 3 |
| IB 303 (IL) | 3 Minor/Concurrent Major | 3 |
|  | Course $^{3}$ |  |


| BLAW 243, ERM 411, or BA <br> 243 | 3-4 Minor/Concurrent Major <br> Course $^{3}$ | 3 |
| :--- | :---: | :---: |
| ENGL 202C or 202D (GWS) |  |  |
| General Education Health <br> and Wellness $(G H W)$ | 1.5 Advanced Level Elective | 3 |

13.5-14.5

15

## Fourth Year

| Fall | Credits Spring | Credits |
| :---: | :---: | :---: |
| EBF 304W (Writing Across the Curriculum)* | 3 EBF 401* | 3 |
| EBF 473 | 3 Elective/Minor/Concurrent Major Course ${ }^{3}$ | 3 |
| EBF 484 or $483{ }^{*}$ | 3 Elective/Minor/Concurrent Major Course ${ }^{3}$ | 3 |
| Minor/Concurrent Major Course ${ }^{3}$ | 3 General Education Knowledge Domain | 3 |
| Elective/Minor/Concurrent Major Course ${ }^{3}$ | 3 General Education Health and Wellness (GHW) | 1.5 |

Total Credits 120-122

* Course requires a grade of C or better for the major
$\ddagger$ Course requires a grade of C or better for General Education
\# Course is an Entrance to Major requirement
† Course satisfies General Education and degree requirement


## University Requirements and General Education Notes:

US and IL are abbreviations used to designate courses that satisfy Cultural Diversity Requirements (United States and International Cultures).
$\mathrm{W}, \mathrm{M}, \mathrm{X}$, and Y are the suffixes at the end of a course number used to designate courses that satisfy University Writing Across the Curriculum requirement.

General Education includes Foundations (GWS and GQ), Knowledge Domains (GHW, GN, GA, GH, GS) and Integrative Studies (Inter-domain) requirements. N or Q (Honors) is the suffix at the end of a course number used to help identify an Inter-domain course, but the inter-domain attribute is used to fill audit requirements. Foundations courses (GWS and $G Q$ ) require a grade of ' $C$ ' or better.

All incoming Schreyer Honors College first-year students at University Park will take ENGL 137H/CAS 137H in the fall semester and ENGL 138T/CAS 138T in the spring semester. These courses carry the GWS designation and satisfy a portion of that General Education requirement. If the student's program prescribes GWS these courses will replace both ENGL 15/ENGL 30H and CAS 100A/CAS 100B/CAS 100C. Each course is 3 credits.

1 Students who begin their studies at non-UP locations and/or join the college after their first year should substitute CAS 100, CAS 100A, CAS 100B, or CAS 100C (GWS) for EMSC 100S (GWS). EMSC 100S Earth and Mineral Sciences First year Seminar (3) is a required course only for students who begin their studies at UP in the College of Earth and Mineral Sciences.
${ }^{2}$ Select 6-7 credits from: CHEM 110 GN(3), EARTH 100 GN(3), EARTH 101 GN;US(3), EARTH 103N GN(3), EARTH 111 GN;US(3), EARTH 150 GN(3), EGEE 101 GN(3), EGEE 102 GN(3), EGEE 120 GS;US;IL(3), GEOG

110 GN(3), GEOG 115 GN(3), GEOSC 2 GN(3), GEOSC 10 GN(3), GEOSC 20 GN(3), GEOSC 21 GN(3), GEOSC 40 GN(3), MATSE 81 GN;IL(3), METEO 3 GN(3), METEO 101 GN(3), PHYS 211 GN(4) or PHYS 250 GN(4). Most courses can also count toward the General Education Knowledge Domain Natural Science (GN) requirement. If a GN course is not selected for this requirement, students will need to add a GN to their plan. Some selections may have additional prerequisites.
${ }^{3}$ Some minors require beginning coursework in a student's first year; other minors require coursework to begin later. Please check prerequisites for minor courses. Please work closely with your adviser to select and plan for a minor, see list of approved minors in the advising notes section.
${ }^{4}$ Select 3 credits from: CED 404(3), CED 429(3), CED 431(3), EBF 411 (3), EBF 483(3)[if not selected for requirement above], ECON 490(3), EME 301(3), GEOG 424 US;IL(3), GEOG 430(3), GEOG 431(3), GEOG 444(3), GEOG 493(3), GEOSC 402Y IL(3), GEOSC 454(3), METEO 473(3), PL SC 490(3)

## Advising Notes:

Entrance to Major requirements: To enter EBF, students must have a cumulative GPA of 2.8 or higher, complete the entrance to major courses (MATH 140, MATH 141, ECON 102) with a C or better, and apply to the major within 40-70 cumulative credits. Only students who are enrolled in EMSC or DUS are eligible to apply to EBF.

Students must complete an approved minor, a concurrent major in any subject, a 15 -credit semester-long education abroad program approved by the professor in charge of EBF, or a minor in Asian Studies with an approved summer education abroad experience. Approved minors include Arabic, Chinese, Civic and Community Engagement, Earth Systems, Energy Engineering, Entrepreneurship and Innovation, Environmental Resource Management, Environmental Systems Engineering, Geographic Information Science, Geosciences, Mathematics, Meteorology, Mining Engineering, Petroleum and Natural Gas Engineering, Russian, Spanish, Statistics, Watersheds and Water Resources, or a relevant minor selected in consultation with the professor in charge of EBF.

Courses required for the major may be offered fall semester only, spring semester only, or both fall and spring semesters. Consult with your adviser and department to discuss your academic progress and course sequencing.

## General Option with Semester Study Abroad: Energy Business and Finance, B.S. at University Park Campus

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## First Year

| Fall | Credits Spring | Credits |
| :---: | :---: | :---: |
| MATH 140 or 140G (GQ) ${ }^{\star \ddagger \# \dagger}$ | 4 MATH 141 or $141 \mathrm{G}(\mathrm{GQ})^{\star} \ddagger+\dagger$ | 4 |
| ECON 102 (GS) ${ }^{\text {*\# } \dagger}$ | 3 ENGL 15, 30H, or ESL 15 (GWS) ${ }^{\ddagger \dagger}$ | 3 |
| EMSC 100S, 100, CAS 100A, CAS 100B, or CAS 100C (GWS) ${ }^{\ddagger+1}$ | 3 EBF 200* | 3 |
| General Education Knowledge Domain | 3 Introductory Level Elective ${ }^{2}$ | 3-4 |
| Introductory Level Elective ${ }^{2}$ | 3 General Education Knowledge Domain | 3 |
|  | 16 | 16-17 |
| Second Year |  |  |
| Fall | Credits Spring | Credits |
| ECON 104 (GS) ${ }^{\dagger}$ | 3 ACCTG 211 | 4 |
| ECON 302* | 3 EME 210 or STAT 401* | 3 |
| EBF 301* | 3 General Education Knowledge Domain | 3 |
| CMPSC 101, 200, 201, or 202 | 3 Elective | 3 |
| General Education Knowledge Domain | 3 Elective | 3 |

## Third Year

| Fall | Credits Spring | Credits |
| :--- | :---: | ---: |
| RM 302* | Approved Study Abroad <br> Program $^{4}$ | 15 |
| IB 303 (IL) | 3 |  |
| EME 460* | 3 |  |
| EBF 304W (Writing Across 3 <br> the Curriculum)  |  |  |

BLAW 243, ERM 411, or BA 3-4
243

|  | $15-16$ | 15 |
| :--- | :---: | ---: |
| Fourth Year | Credits Spring | Credits |
| Fall | 3 EBF 401* | 3 |
| EBF 473 | 3 Advanced Level Elective ${ }^{3}$ | 3 |
| EBF 483 or 484* | 3 ENGL 202C or 202D (GWS) |  |
| Elective | 3 General Education | 3 |
| Elective | Knowledge Domain | 3 |
|  |  |  |


| General Education Health <br> and Wellness (GHW) | 1.5 General Education Health <br> and Wellness (GHW) | 1.5 |
| :--- | :---: | :---: |


|  | and Wellness (GHW) |
| :--- | :--- | :--- |
| $\mathbf{1 3 . 5}$ |  |

Total Credits 120-122

* Course requires a grade of $C$ or better for the major
$\ddagger$ Course requires a grade of $C$ or better for General Education
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${ }^{1}$ Students who begin their studies at non-UP locations and/or join the college after their first year should substitute CAS 100, CAS 100A, CAS 100B, or CAS 100C (GWS) for EMSC 100S (GWS). EMSC 100S Earth and Mineral Sciences First year Seminar (3) is a required course only for students who begin their studies at UP in the College of Earth and Mineral Sciences.
2 Select 6-7 credits from: CHEM 110 GN(3), EARTH 100 GN(3), EARTH 101 GN;US(3), EARTH 103N GN(3), EARTH 111 GN;US(3), EARTH 150 GN(3), EGEE 101 GN(3), EGEE 102 GN(3), EGEE 120 GS;US;IL(3), GEOG 110 GN(3), GEOG 115 GN(3), GEOSC 2 GN(3), GEOSC 10 GN(3), GEOSC $20 \mathrm{GN}(3)$, GEOSC $21 \mathrm{GN}(3)$, GEOSC $40 \mathrm{GN}(3)$, MATSE 81 GN ;IL(3), METEO 3 GN(3), METEO 101 GN(3), PHYS 211 GN(4) or PHYS 250 GN(4). Most courses can also count toward the General Education Knowledge Domain Natural Science (GN) requirement. If a GN course is not selected for this requirement, students will need to add a GN to their plan. Some selections may have additional prerequisites.
${ }^{3}$ Select 3 credits from: CED 404(3), CED 429(3), CED 431(3), EBF 411 (3), EBF 483(3)[if not selected for requirement above], ECON 490(3), EME $301(3)$, GEOG 424 US;IL(3), GEOG 430(3), GEOG 431(3), GEOG 444(3), GEOG 493(3), GEOSC 402Y IL(3), GEOSC 454(3), METEO 473(3), PL SC 490(3)
4 Students can study abroad in any semester. For a study abroad to be approved for EBF, students need to follow the course plan in the EBF Study Abroad Guide (https://www.eme.psu.edu/undergraduate/ academics/undergraduate-programs/energy-business-and-finance/)
and get pre-approval for their study abroad course selections from the EBF program chair.

## Advising Notes:

Entrance to Major requirements: To enter EBF, students must have a cumulative GPA of 2.8 or higher, complete the entrance to major courses (MATH 140, MATH 141, ECON 102) with a C or better, and apply to the major within 40-70 cumulative credits. Only students who are enrolled in EMSC or DUS are eligible to apply to EBF.

Students must complete an approved minor, a concurrent major in any subject, a 15 -credit semester-long education abroad program approved by the professor in charge of EBF, or a minor in Asian Studies with an approved summer education abroad experience.

Courses required for the major may be offered fall semester only, spring semester only, or both fall and spring semesters. Consult with your adviser and department to discuss your academic progress and course sequencing.

## General Option with Minor: Energy Business and Finance, B.S. at Commonwealth Campuses

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## First Year

| Fall | Credits Spring | Credits |
| :---: | :---: | :---: |
| MATH 140 (GQ) ${ }^{\text {f\#\# }}$ | 4 MATH 141 (GQ) ${ }^{\text {* } \ddagger \# \dagger}$ | 4 |
| ECON 102 (GS) ${ }^{\text {*\# }}$ | 3 CAS 100, CAS 100A, CAS 100B, or CAS 100C (GWS) ${ }^{\ddagger \dagger 1}$ | 3 |
| ENGL 15, 30H, or ESL 15 (GWS) ${ }^{\ddagger \dagger}$ | 3 Introductory Level Elective ${ }^{2}$ | 3-4 |
| General Education Knowledge Domain | 3 Minor/Concurrent Major Course ${ }^{3}$ | 3 |
| Introductory Level Elective ${ }^{2}$ | 3 Elective/Minor/Concurrent Major Course ${ }^{3}$ | 3 |
|  | 16 | 16-17 |
| Second Year |  |  |
| Fall | Credits Spring | Credits |
| ECON 104 (GS) ${ }^{\dagger}$ | 3 ACCTG 211 | 4 |
| ECON $302{ }^{*}$ | 3 ENGL 202C or 202D (GWS) ${ }^{\ddagger \dagger}$ | 3 |
| CMPSC 101, 200, or 201 | 3 BLAW 243, ERM 411, or BA $243$ | 3-4 |
| Minor/Concurrent Major Course ${ }^{3}$ | 3 General Education Knowledge Domain | 3 |
| General Education Knowledge Domain | 3 Minor/Concurrent Major Course ${ }^{3}$ | 3 |


|  | 15 | 16-17 |
| :---: | :---: | :---: |
| Third Year |  |  |
| Fall | Credits Spring | Credits |
| EBF 200* | 3 Minor/Concurrent Major Course ${ }^{3}$ | 3 |
| EBF 301* | 3 Minor/Concurrent Major Course ${ }^{3}$ | 3 |
| RM $302{ }^{*}$ | 3 Advanced Level Elective ${ }^{4}$ | 3 |
| EME 210 or STAT 401* | 3 General Education Knowledge Domain | 3 |
| EME 460* | 3 General Education Health and Wellness (GHW) | 1.5 |

## Fourth Year

Fall
Credits Spring
Credits
EBF 304W (Writing Across 3 EBF 401*
the Curriculum) ${ }^{*}$

| EBF 473 | 3 Elective/Minor/Concurrent <br> Major Course $^{3}$ | 3 |
| :--- | :---: | :---: |
| EBF 484 or $483^{*}$ |  <br> Elective/Minor/Concurrent <br> Major Course ${ }^{3}$ | 3 |
| IB 303 (IL) | 3 General Education <br> Knowledge Domain | 3 |


| Minor/Concurrent Major <br> Course $^{3}$ | 3 General Education Health <br> and Wellness (GHW) | 1.5 |
| :--- | ---: | :--- |

## 15

Total Credits 120-122

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## Advising Notes:

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## First Year

| Fall | Credits Spring | Credits |
| :---: | :---: | :---: |
| MATH 140 (GQ) ${ }^{\text {*)\# }}$ ¢ | 4 MATH 141 (GQ) ${ }^{\text {#\# }} \dagger$ | 4 |
| ECON 102 (GS) ${ }^{\text {*\# } \dagger}$ | 3 CAS 100, CAS 100A, CAS 100B, or CAS 100C (GWS) ${ }^{\ddagger \dagger 1}$ | 3 |
| $\begin{aligned} & \text { ENGL 15, 30H, or ESL } 15 \\ & (\text { GWS })^{\ddagger+} \end{aligned}$ | 3 Introductory Level Elective ${ }^{2}$ | 3-4 |
| General Education Knowledge Domain | 3 General Education Knowledge Domain | 3 |
| Introductory Level Elective ${ }^{2}$ | 3 General Education Knowledge Domain | 3 |


| Second Year |  |  |
| :---: | :---: | :---: |
| Fall | Credits Spring | Credits |
| ECON 104 (GS) ${ }^{\dagger}$ | 3 ACCTG 211 | 4 |
| ECON 302* | 3 ENGL 202C or 202D (GWS) ${ }^{\ddagger}$ | 3 |
| CMPSC 101, 200, or 201 | 3 BLAW 243, ERM 411, or BA 243 | 3-4 |
| General Education Knowledge Domain | 3 Elective | 3 |
| Elective | 3 Elective | 3 |
|  | 15 | 16-17 |
| Third Year |  |  |
| Fall | Credits Spring | Credits |
| EBF 200* | 3 Approved Study Abroad ${ }^{4}$ | 15 |
| EBF 301* | 3 |  |
| RM 302* | 3 |  |
| EME 210 or STAT 401* | 3 |  |
| EME 460* | 3 |  |
|  | 15 | 15 |


| Fourth Year |  |  |
| :---: | :---: | :---: |
| Fall | Credits Spring | Credits |
| EBF 304W (Writing Across the Curriculum) ${ }^{\star}$ | 3 EBF 401* | 3 |
| EBF 473 | 3 Advanced Level Elective ${ }^{3}$ | 3 |
| EBF 483 or $484^{*}$ | 3 General Education Knowledge Domain | 3 |
| IB 303 (IL) | 3 Elective | 3 |
| General Education Health and Wellness (GHW) | 1.5 General Education Health and Wellness (GHW) | 1.5 |

## Total Credits 120-122

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${ }^{4}$ Students can study abroad in any semester. For a study abroad to be approved for EBF, students need to follow the course plan in the EBF Study Abroad Guide (https://bulletins.psu.edu/undergraduate/ colleges/earth-mineral-sciences/energy-business-finance-bs/) and get pre-approval for their study abroad course selections from the EBF program chair.

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Resource Management, Environmental Systems Engineering, Geographic Information Science, Geosciences, Mathematics, Meteorology, Mining Engineering, Petroleum and Natural Gas Engineering, Russian, Spanish, Statistics, Watersheds and Water Resources, or a relevant minor selected in consultation with the professor in charge of EBF.

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