EBF Scheduling Tips

Spring 2023

EBF Course Schedules and Prerequisites

- Use the course offerings sheet to check prerequisites, schedules, and controls for courses for the major.
- Information in LionPATH about which semester a class is usually offered is often inaccurate. Use the course offerings sheet instead.
- EBF 200 and EBF 301 are prerequisites for most 400-level EBF courses. You want to take them as soon as possible.
- Stat 401 is a prerequisite to most of the 400-level EBF classes. Make sure to finish Math 140, then Math 141, then Stat 401 as soon as possible.

Important Notes

- EBF 301 is offered in person in fall semesters, and Web in summer.
- New course: EBF 497 (Special Topic: Climate Change Economics)
- EBF 304W is offered in Spring 2024.
- In Fall 2023, EBF 497 (Special Topic: The Great Transition: Law, Economics and the New Future of Energy, with Drs. Kleit and Wiseman) can be used to substitute EBF 304W.
- PNG 397 (Data Analytics for Energy System) can be used as a substitute for Stat 401.
- FIN 301 is NO LONGER allowed as a substitute for EBF 401.

Prerequisites Are Enforced at Enrollment

- Starting with Fall 2023 registration, course prerequisites will be enforced at enrollment in LionPath. You won't be able to enroll in a course without meeting the prerequisite, corequisite, and concurrent course requirements.
 - Penn State policy is here: https://undergrad.psu.edu/aappm/C-5-enforcement-of-recommended-preparation-and-prerequisite-concurrent-corequisite-courses.html.
 - If you are currently enrolled in one or more of the prerequisite courses at the time of registration, you will be "conditionally enrolled". If you still don't meet the prerequisites (i.e., through failing or dropping the prereq), you will be automatically dropped from the scheduled course on the Friday before the first day of classes.
- If you want to enroll in a course but don't have the prerequisites, file a "Prerequisite Override Request" form on LionPath. This form is only available electronically on LionPath. Once you submit the form, it will automatically go to Rob Rousseau for approval (he will consult with appropriate faculty).
 - The justification you put on the form is **IMPORTANT**. Basically, adequate justification is founded on showing you attained equivalent knowledge to the prerequisite course you are missing through other means.
 - Examples of appropriate supporting documentation for the justification are in the linked policy above.
 - Inadequate justification: Needing a course to graduate.

Prerequisites of EBF courses

EBF 200

ECON 102 and (MATH 22 or MATH 26 or MATH 40 or MATH 41 or MATH 140 or placement beyond MATH 22)

EBF 304

EBF 200 and EME 460 and (STAT 401 or EBF 472 or ECON 306)

EBF 401

EBF 200 and EBF 301 and EME 460 and (EBF 472 or STAT 200 or STAT 401 or ECON 106 or SCM 200)

EBF 473

EBF 200 and (MATH 111 or MATH 141) and (EBF 472 or STAT 200 or STAT 401 or ECON 106 or SCM 200)

EBF 483

EBF 200 and MATH 140 and EBF 301 and (EBF 472 or STAT 200 or STAT 401 or ECON 106 or SCM 200)

EBF 484

(MATH 110 or MATH 140) and EBF 200 and EBF 301 and (ECON 302 or MATH 250 or MATH 251)

FIN 301 is NO LONGER

allowed as a substitute for EBF 401, given the material FIN 301 currently covers.

New Course:

EBF 497 (Special Topic: Climate Change Economics)

- A NEW course in Fall 2023, offered by Dr. Joel Landry
- Can be used in place of the 400-level elective

 Note: there are two EBF 497 courses offered in Fall 2023. The other EBF 497 course (Special Topic: The Great Transition: Law, Economics and the New Future of Energy) is offered by Drs. Kleit and Wiseman

EBF 304W Offered in Spring 2024

Two options to meet the EBF 304W requirement

Fall 2023: EBF 497 by Drs. Kleit and Wiseman

EBF 497: Special Topic: The Great Transition: Law, Economics and the New Future of Energy, with Drs. Kleit and Wiseman

Spring 2024: EBF 304W

Note: The other EBF 497 course (Special Topic: Climate Change Economics) in Fall 2023 does not have enough writing component and cannot be used to meet the WAC requirement

EME 450: Energy Crisis Leadership

- Offered in Spring 2024, with Dr. Kleit
- Can be used in place of EBF 304, but not for your "Writing Across the Curriculum" requirement (i.e., you need to take a W course for your WAC requirement).

Can be used in place of the 400-level elective.

PNG 397: Data Analytics for Energy System

Offered in both Fall 2023 and Spring 2024.

• Prerequisite: Math 22 or higher.

It can be used to meet the Stat 401 requirement by EBF

• It can be used to meet the Stat 401 prereq of advanced EBF courses

EMSC 297: Geopolitics of Energy

• Offered in Spring 2024, by Dr. Lo Prete.

Energy security and international relation.

Can be used for GS requirement.

EBF 301

• EBF 301 is offered in residence in Fall semesters.

• EBF 301 is offered **WEB** in Summer.

• EBF 301 is NOT offered in Spring semesters.

EBF 483 and EBF 484

• EBF 483 will be offered in Fall 2023.

• EBF 484 will be offered in Spring 2024.

EBF 473 Is Offered in Fall ONLY

• In-residence EBF 473 is offered in fall semesters only.

• EBF 473 will also be offered online in summer, but we may cancel it if the enrollment is low.

• Make sure that you will meet the prerequisites for EBF 473, including statistics, before you plan to take it.

EBF 401 Is Offered in Spring ONLY

• EBF 401 is offered in Spring semesters only.

 The EBF program NO LONGER allows FIN 301 offered by Smeal to substitute for EBF 401, given the material FIN 301 currently covers.

• The EBF program allows FIN 305 offered by Smeal to substitute for EBF 401, but EBF students should realize that they can enter the class only during the summer, and they will need to have all of the prerequisites (especially a statistics class).

Courses at Smeal

• ACCTG 211:

Students should take in Spring. For sections in Fall, the remaining seats are not open to EBF until the week before classes start.

• RM 302:

Students should take in Fall, because several sections are offered in Fall, but only one is offered in Spring by Smeal

What Should Students Take?

Take ECON 302, EBF 200, EBF 301, EME 460 and STAT 401 as soon as possible

Next Steps? Time to take BLAW 243, CMPSC 101, ECON 104, ACCTG 211

Getting Close to Graduation? Take EBF 304, EBF 401, EBF 473, EBF 483/484, IB 303, RM 302, 400-level elective

Introductory Electives (100-Level Electives)

- The official list from the Bulletin is below.
- Any GN course offered by EMS can be used to fill this requirement (need a course substitution form for a class not listed in the Bulletin)
- CHEM 110, PHYS 211, PHYS 250 are also in the Bulletin.
- CHEM 112, PHYS 212, and PHYS 251 can also be used (need a course substitution form).

GENERAL OPTION: (24–36 credits)

ADDITIONAL COURSES (9–10 credits)

Select 6–7 credits from: CHEM 110 GN(3), EARTH 100 GN(3), EARTH 101 GN;US(3), EARTH 103 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 002 GN(3), GEOSC 010 GN(3), GEOSC 020 GN(3), GEOSC 021 GN(3), GEOSC 040 GN(3), MATSE 081 GN;IL(3), METEO 003 GN(3), METEO 101 GN(3), PHYS 211 GN(4) or PHYS 250 GN(4) (Sem: 1–4)

Environmental Courses

- Also referred to as "400-level electives" or "advanced electives."
- A list is on the degree audit.
- More options are listed in the Insider's Guide a petition will be needed to have courses not listed on the audit count there, but advisors will approve petitions for courses listed in the Insider's Guide.
- Note that many have prerequisites.
- Generally speaking, courses related to EBF (technical courses in energy and environment, math/statistical/econometric courses, economics and finance courses on firms and industry, data analytics and programming, etc.) are allowed for this 400-level elective.

Want to Know About Summer Classes?

- EBF publishes a list of summer classes every year in January or February, after the summer schedule is released. Look for it on the EBF web site.
- Currently planned (but not guaranteed) summer options at EME:
- ➤ EBF 200
- ➤ EBF 301
- ➤ EME 460
- ➤ EBF 473

Note: EBF summer courses and EME 460 could be cancelled if the enrollment is low.

• Other summer courses: IB 303, FIN 301 (substitute for EBF 401), FIN 305W (substitute for EBF 401 or EBF 304W), Natural Science Courses (100 Level GN Electives, many options), Environmental Courses (400 Level Electives, several options), Math, Statistics, Accounting

Substitutions in General Education

Students WITHOUT the integrative studies requirement

3-6-9 substitution

3 or 6 credits of GA; 3 or 6 credits of GH; 9 credits of GS (ECON 102, 104, 302)

*If you do the 3-6-9 option (using ECON 102, 104 and 302), you will need an additional 3 credits of elective to reach the 120-credit graduation requirement.

Students WITH the integrative studies requirement

Move 3 substitution

Substitute a course in one of the Knowledge Domains areas of Arts, Humanities, Social and Behavioral Sciences, Natural Sciences, or Health and Wellness for a course in one of the other areas.

*Students must still have a single domain in each knowledge domain and complete the integrative studies requirement, so careful planning is needed.

For either substitution, you'll need to meet with an advisor in the Ryan Family Student Center.

Want to Know About Minor Choices?

- Minors that may be used to satisfy the EBF minor requirement:
- Any minor offered by EMS, except EBF and Environmental Inquiry
- ➤ Any foreign language
- ➤ Civic and Community Engagement, Entrepreneurship and Innovation, Environmental Resource Management, Math, Statistics, Supply Chain and Information Sciences and Technology (SCIST), Sustainability Leadership, Watersheds and Water Resources
- Most hard science or engineering minors will be approved, but check with the EBF program chair in advance to confirm that a specific hard science or engineering minor you are considering will be accepted
- You can also take any concurrent major instead of a minor, as long as EBF students are accepted into the concurrent major.

Tips for Minors

- Start planning for your minor early. The Bulletin lists course requirements for each minor and an advising contact.
- Many minors include courses that are prerequisites to each other or may only be offered once a year.
- IST minor is not recommended: it is difficult to finish as it is difficult for students to be enrolled in its courses.

- The program chair will not waive the minor requirement because of difficulty accessing or scheduling classes.
- Plan EARLY and discuss course offerings and prerequisites with the minor's advisors.

Entrepreneurship and Innovation Minor (ENTI)

- Many EBF students are attracted to the ENTI minor, but the New Ventures cluster is becoming over-subscribed.
- Seats in New Ventures cluster courses may be limited in the future.

- EBF students interested in the ENTI minor should seriously consider an alternative cluster. Good alternatives are:
 - Entrepreneurship as Advocacy
 - Food and Bio Innovation
 - Social Entrepreneurship
 - Technology Based Entrepreneurship

Talk to the advisors in the cluster if you consider one of the alternative clusters!

Want to Have a Concurrent Major?

 You can use any concurrent major, instead of a minor, to met EBF General Option requirements.

- To enroll in a concurrent major you:
- 1. Meet with your EBF program chair and ask for approval to take a concurrent major.
- 2. Meet with the advisor(s) for the second (concurrent) major to discuss your plans and ask for their approval.
- 3. Add the major using Update Academics on LionPATH.

Note that admission into a concurrent major is not automatic. Admission must be approved by both departments/programs.

Want to Know About the Study Abroad Option?

- Start planning early!
- Study abroad generally needs to be planned at least one year in advance.
- Begin by reading the EBF Study Abroad Guide on the EBF website.
- Study abroad options include some classes that can substitute for required classes for the major, so plan ahead which classes you will take while abroad.
- ➤ Penn State's City Semester Pittsburgh program is acceptable for the General Option (https://citysemesterpittsburgh.psu.edu/)

Important Notes for Your Study Abroad

• Before you apply, you must meet with the EBF program chair to discuss your plan and get it (including course lists) approved and documented.

 You must contact the EBF program chair if you need to take different courses when you are abroad and get the changes approved before you take the courses.

• If you don't meet with the EBF program chair before you apply OR don't take the agreed-on courses while abroad, the study abroad might not be approved in which case you'd need to do a minor/concurrent major in order to graduate.

Scheduling Tips

- Schedule on your assigned scheduling date.
- Look for alternative sections if the one you put in your shopping cart is full.
- Put yourself on the waitlist right away for classes that are full.
- Use the swap function in LionPATH.
- If you don't meet controls for a class, check whether there are different controls on other sections.

Helpful Documents, at: www.eme.psu.edu/ebf

- The EBF Insider's Guides
- Summer courses for EBF students
- EBF check sheets (and how to use them)
- Study Abroad Guide for EBF students
- Check the bulletin board outside 115 Hosler for more information!