

METEOROLOGY AND ATMOSPHERIC SCIENCE, 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: Meteorology and Atmospheric Science, 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) ^{**††}	4	MATH 141 or 141G (GQ) ^{**††}	4
CHEM 110 (GN) [†]	3	ENGL 15, 30H, or ESL 15 (GWS) ^{††}	3
EMSC 100S (GWS) ^{††1}	3	PHYS 211 (GN) [†]	4
METEО 201 [*]	3	METEО 273, CMPSC 101, CMPSC 200, CMPSC 201, or 202	3
General Education Knowledge Domain	3		
	16		14

Second Year

Fall	Credits	Spring	Credits
PHYS 212 (GN) [†]	4	METEО 431 [*]	3
METEО 300 [*]	4	MATH 251	4
MATH 230 ^{*2}	4	STAT 301 or STAT 401	3
General Education Knowledge Domain	3	General Education Knowledge Domain	3
		General Education Health and Wellness (GHW)	3
	15		16

Third Year

Fall	Credits	Spring	Credits
METEО 421 [*]	4	METEО 470 [*]	3
METEО 436, 437, or 454 [*]	3	METEО 440W [*]	3
METEО 411 [*]	4	General Education Foundation Selection (GWS) ^{††1}	3

METEО 473 or 474 [*]	3 General Education Knowledge Domain	3
	Professional Elective ³	3
	14	15

Fourth Year

Fall	Credits	Spring	Credits
General Education Knowledge Domain	3	Professional Elective ³	3
General Education Knowledge Domain	3	Professional Elective ³	3
Professional Elective ³	3	Professional Elective ³	3
Professional Elective ³	3	Elective	3
Professional Elective ³	3	Elective	4
	15		16

Total Credits 121

- * Course requires a grade of C or better for the major
- ‡ 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

¹ Students who begin their studies at non-UP locations and/or join the college after their first year should substitute CAS 100 (GWS), CAS 100A, CAS 100B, or CAS 100C; or ENGL 202C (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 Students may also complete this requirement by taking MATH 231 and MATH 232. MATH 231 is a prerequisite for MATH 232, so students should plan to take MATH 231 before MATH 232. Students taking MATH 231 and 232 should work with their adviser on other appropriate schedule adjustments.

³ Professional elective: Select 21 credits, in consultation with adviser, from 400-level METEO courses and/or 300-, or 400-level courses from the Colleges of Agricultural Sciences, Earth and Mineral Sciences, Engineering, and/or Science. With the approval of a meteorology adviser, some 200-level courses from those Colleges may also be used.

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).

W, M, 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 GQ) 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

2 Meteorology and Atmospheric Science, B.S.

replace both ENGL 15/ENGL 30H and CAS 100A/CAS 100B/CAS 100C.
Each course is 3 credits.

General Option: Meteorology and Atmospheric Science, B.S. at Commonwealth Campuses

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 ^{†##}	4 MATH 141 ^{††}	4
CHEM 110 (GN) [†]	3 PHYS 211 (GN) [†]	4
ENGL 15, 30H, or ESL 15 ^{††1}	3 METEO 101 (online) [*]	3
General Education Knowledge Domain	3 METEO 273, CMPSC 101, CMPSC 200, CMPSC 201, or 202	3
General Education Health and Wellness (GHW)	1.5	
	14.5	14
Second Year		
Fall	Credits Spring	Credits
PHYS 212 (GN) [†]	4 MATH 251	4
MATH 230 ^{*2}	4 METEO 300 ^{*3}	4
General Education Foundation Selection (GWS) ^{††1}	3 General Education Foundation Selection (GWS) ^{††1}	3
General Education Knowledge Domain	3 General Education Knowledge Domain	3
General Education Health and Wellness (GHW)	1.5 General Education Knowledge Domain	3
	15.5	17
Third Year		
Fall	Credits Spring	Credits
METEO 431 [*]	3 METEO 440W [*]	3
STAT 301 or STAT 401	3 METEO 411 [*]	4
Elective	3 METEO 421 [*]	4
General Education Knowledge Domain	3 Professional Elective ⁴	3
General Education Knowledge Domain	3	
	15	14
Fourth Year		
Fall	Credits Spring	Credits
METEO 470 [*]	3 Professional Elective ⁴	3
METEO 473 or 474 [*]	3 Professional Elective ⁴	3
METEO 436, 437, or 454 [*]	3 Professional Elective ⁴	3
Professional Elective ⁴	3 Professional Elective ⁴	3
Professional Elective ⁴	3 Elective	4
	15	16
Total Credits		121

* Course requires a grade of C or better for the major
 ‡ 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

- Students who begin their studies at non-UP locations and/or join the college after their first year should substitute CAS 100 (GWS), CAS 100A, CAS 100B, or CAS 100C; or ENGL 202C (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.
- Students may also complete this requirement by taking MATH 231 and MATH 232. MATH 231 is a prerequisite for MATH 232, so students should plan to take MATH 231 before MATH 232. Students taking MATH 231 and 232 should work with their adviser on other appropriate schedule adjustments.
- METEO 300 can be taken 2nd year spring, if offered online.
- Professional elective: Select 21 credits, in consultation with adviser, from 400-level METEO courses and/or 300-, or 400-level courses from the Colleges of Agricultural Sciences, Earth and Mineral Sciences, Engineering, and/or Science. With the approval of a meteorology adviser, some 200-level courses from those Colleges may also be used.

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).

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Atmospheric Sciences Option: Meteorology and Atmospheric Science, 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) ^{†‡##}	4	MATH 141 or 141G (GQ) ^{†‡}	4
CHEM 110 (GN) [†]	3	ENGL 15, 30H, or ESL 15 (GWS) ^{††}	3
EMSC 100S (GWS) ^{††1}	3	PHYS 211 (GN) [†]	4
METEO 201 [*]	3	METEO 273, CMPSC 101, CMPSC 200, CMPSC 201, or 202	3
General Education knowledge domain	3		
	16		14

Second Year

Fall	Credits	Spring	Credits
PHYS 212 (GN) [†]	4	METEO 431 [*]	3
METEO 300 [*]	4	MATH 251	4
MATH 230 ^{*2}	4	STAT 301 or STAT 401	3
General Education Knowledge Domain	3	General Education Knowledge Domain	3
		General Education Health and Wellness (GHW)	3
	15		16

Third Year

Fall	Credits	Spring	Credits
METEO 421 [*]	4	METEO 470 [*]	3
METEO 436, 437, or 454 ^{*3}	3	METEO 440W [*]	3
METEO 411 [*]	4	General Education Foundation Selection (GWS) ^{††1}	3
METEO 473 or 474 ^{*3}	3	General Education Knowledge Domain	3
		Professional Elective ³	3
	14		15

Fourth Year

Fall	Credits	Spring	Credits
METEO 422	3	Professional Elective ³	3
METEO 436, 437, or 454 ^{*3}	3	Professional Elective ³	3
General Education Knowledge Domain	3	Professional Elective ³	3
General Education Knowledge Domain	3	Elective	3
Professional Elective ³	3	Elective	4
	15		16

Total Credits 121

* Course requires a grade of C or better for the major

‡ 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

¹ Students who begin their studies at non-UP locations and/or join the college after their first year should substitute CAS 100 (GWS), CAS 100A, CAS 100B, or CAS 100C; or ENGL 202C (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 Students may also complete this requirement by taking MATH 231 and MATH 232. MATH 231 is a prerequisite for MATH 232, so students should plan to take MATH 231 before MATH 232. Students taking MATH 231 and 232 should work with their adviser on other appropriate schedule adjustments.

³ Students should select 3-6 credits from METEO 473(3) and METEO 474(3); 6-9 credits from METEO 436(3), METEO 437(3), and METEO 454(3); and 6-13 credits from METEO 414(4), METEO 434(3), METEO 451(3), METEO 452(3), METEO 455(3), METEO 465(3), METEO 466(3), METEO 471(3), METEO 477(3), METEO 480W(3). Up to 9 of these credits in relevant courses in Acoustics, Chemistry, Engineering, Mathematics, and Physics may be substituted with the approval of the student's faculty adviser. Students must also select 3 credits of Writing across the curriculum courses, or their equivalent, in addition to METEO 440W.

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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.

Atmospheric Sciences Option: Meteorology and Atmospheric Science, B.S. at Commonwealth Campuses

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 ^{†##}	4 MATH 141 ^{##}	4
CHEM 110 (GN) [†]	3 PHYS 211 (GN) [†]	4
ENGL 15, 30H, or ESL 15 ^{††1}	3 METEO 101 (online) [*]	3
General Education Knowledge Domain	3 METEO 273, CMPSC 101, CMPSC 200, CMPSC 201, or 202	3
General Education Health and Wellness (GHW)	1.5	
	14.5	14
Second Year		
Fall	Credits Spring	Credits
PHYS 212 (GN) [†]	4 MATH 251	4
MATH 230 ^{*2}	4 METEO 300 ^{*3}	4
General Education Foundation Selection (GWS) ^{††1}	3 General Education Foundation Selection (GWS) ^{††1}	3
General Education Knowledge Domain	3 General Education Knowledge Domain	3
General Education Health and Wellness (GHW)	1.5 General Education Knowledge Domain	3
	15.5	17
Third Year		
Fall	Credits Spring	Credits
METEO 431 [*]	3 METEO 440W [*]	3
STAT 301 or STAT 401	3 METEO 411 [*]	4
Elective	3 METEO 421 [*]	4
General Education Knowledge Domain	3 Professional Elective ⁴	3
General Education Knowledge Domain	3	
	15	14
Fourth Year		
Fall	Credits Spring	Credits
METEO 470 [*]	3 METEO 436, 437, or 454 [*]	3
METEO 473 or 474 [*]	3 Professional Elective ⁴	3
METEO 436, 437, or 454 [*]	3 Professional Elective ⁴	3
METEO 422	3 Professional Elective ⁴	3
Professional Elective ⁴	3 Elective	4
	15	16
Total Credits		121

* Course requires a grade of C or better for the major
 ‡ 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

- Students who begin their studies at non-UP locations and/or join the college after their first year should substitute CAS 100 (GWS), CAS 100A, CAS 100B, or CAS 100C; or ENGL 202C (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.
- Students may also complete this requirement by taking MATH 231 and MATH 232. MATH 231 is a prerequisite for MATH 232, so students should plan to take MATH 231 before MATH 232. Students taking MATH 231 and 232 should work with their adviser on other appropriate schedule adjustments.
- METEO 300 can be taken 2nd year spring, if offered online.
- Students should select 3-6 credits from METEO 473(3) and METEO 474(3); 6-9 credits from METEO 436(3), METEO 437(3), and METEO 454(3); and 6-13 credits from METEO 414(4), METEO 434(3), METEO 451(3), METEO 452(3), METEO 455(3), METEO 465(3), METEO 466(3), METEO 471(3), METEO 477(3), METEO 480W(3). Up to 9 of these credits in relevant courses in Acoustics, Chemistry, Engineering, Mathematics, and Physics may be substituted with the approval of the student's faculty adviser. Students must also select 3 credits of Writing across the curriculum courses, or their equivalent, in addition to METEO 440W.

University Requirements and General Education Notes:

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Environmental Meteorology Option: Meteorology and Atmospheric Science, B.S. at University Park Campus

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First Year

Fall	Credits	Spring	Credits
MATH 140 or 140G (GQ) ^{†‡#†}	4	MATH 141 or 141G (GQ) ^{††}	4
CHEM 110 (GN) [†]	3	ENGL 15, 30H, or ESL 15 (GWS) ^{††}	3
EMSC 100S (GWS) ^{†††}	3	PHYS 211 (GN) [†]	4
METEO 201 [*]	3	METEO 273, CMPSC 101, CMPSC 200, CMPSC 201, or 202	3
General Education Knowledge Domain	3		
	16		14

Second Year

Fall	Credits	Spring	Credits
PHYS 212 (GN) [†]	4	METEO 431 [*]	3
METEO 300 [*]	4	MATH 251	4
MATH 230 ^{*2}	4	STAT 301 or STAT 401	3
General Education Knowledge Domain	3	General Education Knowledge Domain	3
		General Education Health and Wellness (GHW)	3
	15		16

Third Year

Fall	Credits	Spring	Credits
METEO 421 [*]	4	METEO 470 [*]	3
METEO 411 [*]	4	METEO 440W [*]	3
METEO 473 or 474 [*]	3	General Education Foundation Selection (GWS) ^{†††}	3
CE 370	3	General Education Knowledge Domain	3
		Professional Elective ³	3
	14		15

Fourth Year

Fall	Credits	Spring	Credits
METEO 454 [*]	3	METEO 455	3
General Education Knowledge Domain	3	Professional Elective ³	3
General Education Knowledge Domain	3	Professional Elective ³	3
Professional Elective ³	3	Elective	3
Professional Elective ³	3	Elective	4
	15		16

Total Credits 121

* Course requires a grade of C or better for the major

‡ 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

¹ Students who begin their studies at non-UP locations and/or join the college after their first year should substitute CAS 100 (GWS), CAS 100A, CAS 100B, or CAS 100C; or ENGL 202C (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 Students may also complete this requirement by taking MATH 231 and MATH 232. MATH 231 is a prerequisite for MATH 232, so students should plan to take MATH 231 before MATH 232. Students taking MATH 231 and 232 should work with their adviser on other appropriate schedule adjustments.

³ Professional elective: Select 15-17 credits from BIOL 110 GN(4), CE 360(3), CE 461(3), CE 475(4), CE 479(3), CHEM 112 GN(3), CHEM 113 GN(1), CHEM 450(3), CHEM 457(2), CHEM 464(3), ERM 430(3), ERM 435(3), ERM 447(3), ERM 450(3), GEOG 313(3), GEOG 314 GN(3), GEOG 361(3), GEOG 362(3), GEOG 363(3), GEOG 414(3), GEOG 417(3), GEOG 463(3), ME 405(3), ME 433(3), METEO 419(3), METEO 437(3).

University Requirements and General Education Notes:

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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 GQ) 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.

Environmental Meteorology Option: Meteorology and Atmospheric Science, B.S. at Commonwealth Campuses

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 ^{†#†}	4 MATH 141 ^{††}	4
CHEM 110 (GN) [†]	3 PHYS 211 (GN) [†]	4
ENGL 15, 30H, or ESL 15 ^{††1}	3 METEO 101 (online) [*]	3
General Education Knowledge Domain	3 METEO 273, CMPSC 101, CMPSC 200, CMPSC 201, or 202	3
General Education Health and Wellness (GHW)	1.5	
	14.5	14
Second Year		
Fall	Credits Spring	Credits
PHYS 212 (GN) [†]	4 MATH 251	4
MATH 230 ^{*2}	4 METEO 300 ^{*3}	4
General Education Foundation Selection (GWS) ^{††1}	3 General Education Foundation Selection (GWS) ^{††1}	3
General Education Knowledge Domain	3 General Education Knowledge Domain	3
General Education Health and Wellness (GHW)	1.5 General Education Knowledge Domain	3
	15.5	17
Third Year		
Fall	Credits Spring	Credits
METEO 431 [*]	3 METEO 440W [*]	3
STAT 301 or STAT 401	3 METEO 411 [*]	4
CE 370	3 METEO 421 [*]	4
General Education Knowledge Domain	3 Professional Elective ⁴	3
Elective	3	
	15	14
Fourth Year		
Fall	Credits Spring	Credits
METEO 470 [*]	3 METEO 455	3
METEO 473 or 474 [*]	3 Professional Elective ⁴	3
METEO 454 [*]	3 Professional Elective ⁴	3
General Education Knowledge Domain	3 Professional Elective ⁴	3
Professional Elective ⁴	3 Elective	4
	15	16
Total Credits 121		

* Course requires a grade of C or better for the major
 ‡ 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

- Students who begin their studies at non-UP locations and/or join the college after their first year should substitute CAS 100 (GWS), CAS 100A, CAS 100B, or CAS 100C; or ENGL 202C (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.
- Students may also complete this requirement by taking MATH 231 and MATH 232. MATH 231 is a prerequisite for MATH 232, so students should plan to take MATH 231 before MATH 232. Students taking MATH 231 and 232 should work with their adviser on other appropriate schedule adjustments.
- METEO 300 can be taken 2nd year spring, if offered online.
- Professional elective: Select 15-17 credits from BIOL 110 GN(4), CE 360(3), CE 461(3), CE 475(4), CE 479(3), CHEM 112 GN(3), CHEM 113 GN(1), CHEM 450(3), CHEM 457(2), CHEM 464(3), ERM 430(3), ERM 435(3), ERM 447(3), ERM 450(3), GEOG 313(3), GEOG 314 GN(3), GEOG 361(3), GEOG 362(3), GEOG 363(3), GEOG 414(3), GEOG 417(3), GEOG 463(3), ME 405(3), ME 433(3), METEO 419(3), METEO 437(3).

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).

W, M, 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 GQ) require a grade of 'C' or better.

Weather Risk Management Option: Meteorology and Atmospheric Science, 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) ^{‡##†}	4 MATH 141 or 141G (GQ) ^{‡†}	4
CHEM 110 (GN) [†]	3 ENGL 15, 30H, or ESL 15 (GWS) ^{‡†}	3
EMSC 100S (GWS) ^{††1}	3 PHYS 211 (GN) [†]	4
METEO 201 [*]	3 METEO 273, CMPSC 101, CMPSC 200, CMPSC 201, or 202	3
ECON 102 [†]	3	
	16	14

Second Year

Fall	Credits Spring	Credits
PHYS 212 (GN) [†]	4 METEO 431 [*]	3
METEO 300 [*]	4 MATH 251	4
MATH 230 ^{*2}	4 STAT 301 or STAT 401	3
General Education Knowledge Domain	3 General Education Knowledge Domain	3
	General Education Health and Wellness (GHW)	3
	15	16

Third Year

Fall	Credits Spring	Credits
METEO 421 [*]	4 METEO 470 [*]	3
METEO 436, 437, or 454 [*]	3 METEO 440W [*]	3
METEO 411 [*]	4 METEO 415, 473, or 474 ^{*3}	3
General Education Knowledge Domain	3 EBF/EGEE Selection ⁴	3
	General Education Foundation Selection (GWS) ^{††1}	3
	14	15

Fourth Year

Fall	Credits Spring	Credits
METEO 415, 473, or 474 [*]	3 METEO 460	3
EBF 473	3 EBF/EGEE Selection ⁴	3
General Education Knowledge Domain	3 STAT Selection ⁵	3
General Education Knowledge Domain	3 Elective	3
Elective	3 Elective	4
	15	16

Total Credits 121

‡ 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

¹ Students who begin their studies at non-UP locations and/or join the college after their first year should substitute CAS 100 (GWS), CAS 100A, CAS 100B, or CAS 100C; or ENGL 202C (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 Students may also complete this requirement by taking MATH 231 and MATH 232. MATH 231 is a prerequisite for MATH 232, so students should plan to take MATH 231 before MATH 232. Students taking MATH 231 and 232 should work with their adviser on other appropriate schedule adjustments.

³ Select 6 credits from METEO 415(3), METEO 473(3) or METEO 474(3).

⁴ Select 6 credits from EBF 301(3); EBF 483(3), EBF 484(3); EGEE 437(3); EGEE 438(3); or EME 460(3).

⁵ Select 3 credits from ECON 490(3), STAT 318(3), STAT 319(3), STAT 414(3), STAT 415(3), STAT 460(3) or STAT 462(3).

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).

W, M, 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 GQ) 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.

* Course requires a grade of C or better for the major

Weather Risk Management Option: Meteorology and Atmospheric Science, B.S. at Commonwealth Campuses

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 ^{†##}	4 MATH 141 ^{††}	4
CHEM 110 (GN) [†]	3 PHYS 211 (GN) [†]	4
ENGL 15, 30H, or ESL 15 ^{††1}	3 METEO 101 (online) [*]	3
ECON 102 [†]	3 METEO 273, CMPSC 101, CMPSC 200, CMPSC 201, or 202	3
General Education Health and Wellness (GHW)	1.5	
	14.5	14
Second Year		
Fall	Credits Spring	Credits
PHYS 212 (GN) [†]	4 MATH 251	4
MATH 230 ^{*2}	4 METEO 300 ^{*3}	4
General Education Foundation selection (GWS) ^{††1}	3 General Education Foundation Selection (GWS) ^{††1}	3
General Education Knowledge Domain	3 General Education Knowledge Domain	3
General Education Health and Wellness (GHW)	1.5 General Education Knowledge Domain	3
	15.5	17
Third Year		
Fall	Credits Spring	Credits
METEO 431 [*]	3 METEO 440W [*]	3
STAT 301 or STAT 401	3 METEO 411 [*]	4
Elective	3 METEO 421 [*]	4
General Education Knowledge Domain	3 EBF/EGEE Selection ⁴	3
General Education Knowledge Domain	3	
	15	14
Fourth Year		
Fall	Credits Spring	Credits
METEO 470 [*]	3 METEO 460	3
METEO 436, 437, or 454 [*]	3 METEO 415, 473, or 474 ^{*5}	3
METEO 415, 473, or 474 ^{*5}	3 EBF/EGEE Selection ⁴	3
EBF 473	3 STAT Selection ⁶	3
Elective	3 Elective	4
	15	16
Total Credits		121

Course is an Entrance to Major requirement
 † Course satisfies General Education and degree requirement

- ¹ Students who begin their studies at non-UP locations and/or join the college after their first year should substitute CAS 100 (GWS), CAS 100A, CAS 100B, or CAS 100C; or ENGL 202C (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 Students may also complete this requirement by taking MATH 231 and MATH 232. MATH 231 is a prerequisite for MATH 232, so students should plan to take MATH 231 before MATH 232. Students taking MATH 231 and 232 should work with their adviser on other appropriate schedule adjustments.
- ³ METEO 300 can be taken 2nd year spring, if offered online.
- ⁴ Select 6 credits from EBF 301(3); EBF 483(3), EBF 484(3); EGEE 437(3); EGEE 438(3); or EME 460(3).
- ⁵ Select 6 credits from METEO 415(3), METEO 473(3) or METEO 474(3).
- ⁶ Select 3 credits from ECON 490(3), STAT 318(3), STAT 319(3), STAT 414(3), STAT 415(3), STAT 460(3) or STAT 462(3).

University Requirements and General Education Notes:

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W, M, 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 GQ) require a grade of 'C' or better.

* Course requires a grade of C or better for the major
 ‡ Course requires a grade of C or better for General Education

Weather Forecasting and Communications Option: Meteorology and Atmospheric Science, 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) ^{**#†}	4 MATH 141 or 141G (GQ) ^{**†}	4
CHEM 110 (GN) [†]	3 ENGL 15, 30H, or ESL 15 (GWS) ^{††}	3
EMSC 100S (GWS) ^{††1}	3 PHYS 211 (GN) [†]	4
METEO 201 [*]	3 METEO 273, CMPSC 101, CMPSC 200, CMPSC 201, or 202	3
General Education Knowledge Domain	3	
	16	14

Second Year

Fall	Credits Spring	Credits
PHYS 212 (GN) [†]	4 METEO 431 [*]	3
METEO 300 [*]	4 MATH 251	4
MATH 230 ^{*2}	4 STAT 301 or STAT 401	3
General Education Knowledge Domain	3 General Education Knowledge Domain	3
	General Education Health and Wellness (GHW)	3
	15	16

Third Year

Fall	Credits Spring	Credits
METEO 421 [*]	4 METEO 470 [*]	3
METEO 411 [*]	4 METEO 440W [*]	3
METEO 481	3 METEO 482	3
METEO 473 or 474 ^{*3}	3 General Education Foundation Selection (GWS) ^{††1}	3
	General Education Knowledge Domain	3
	14	15

Fourth Year

Fall	Credits Spring	Credits
METEO 436 or 437 [*]	3 METEO 414	4
METEO 415	3 Professional Elective ⁴	3
General Education Knowledge Domain	3 Professional Elective ⁴	3
General Education Knowledge Domain	3 Elective	3

Professional Elective ⁴	3 Elective	3
	15	16

Total Credits 121

* Course requires a grade of C or better for the major

‡ 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

¹ Students who begin their studies at non-UP locations and/or join the college after their first year should substitute CAS 100 (GWS), CAS 100A, CAS 100B, or CAS 100C; or ENGL 202C (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 Students may also complete this requirement by taking MATH 231 and MATH 232. MATH 231 is a prerequisite for MATH 232, so students should plan to take MATH 231 before MATH 232. Students taking MATH 231 and 232 should work with their adviser on other appropriate schedule adjustments.

³ Select 3-6 credits from METEO 473(3) and METEO 474(3).

⁴ Professional elective: Select 6-9 credits from CAS 211(3), EE 477(3) or METEO 477(3); ENGL 416(3), GEOG 333(3), GEOG 361(3), GEOG 362(3), GEOG 363(3), GEOG 417(3), GEOG 467(3), GEOSC 402 IL(3), METEO 413(3), METEO 416(3), METEO 418(3), METEO 419(3), METEO 422(3), METEO 434(3), METEO 451(3), METEO 452(3), METEO 454(3), METEO 471(3), METEO 483(3), METEO 486(1-2, max 3), any two from METEO 495A(3), METEO 495B(3), METEO 495C(3), METEO 495D(3) or METEO 495E(3).

University Requirements and General Education Notes:

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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.

Weather Forecasting and Communications Option: Meteorology and Atmospheric Science, B.S. at Commonwealth Campuses

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 ^{†#†}	4 MATH 141 ^{††}	4
CHEM 110 (GN) [†]	3 PHYS 211 (GN) [†]	4
ENGL 15, 30H, or ESL 15 ^{††1}	3 METEO 101 (online) [*]	3
General Education Knowledge Domain	3 METEO 273, CMPSC 101, CMPSC 200, CMPSC 201, or 202	3
General Education Health and Wellness (GHW)	1.5	
	14.5	14

Second Year

Fall	Credits Spring	Credits
PHYS 212 (GN) [†]	4 MATH 251	4
MATH 230 ^{*2}	4 METEO 300 ^{*3}	4
General Education Foundation Selection (GWS) ^{††1}	3 General Education Foundation Selection (GWS) ^{††1}	3
General Education Knowledge Domain	3 General Education Knowledge Domain	3
General Education Health and Wellness (GHW)	1.5 General Education Knowledge Domain	3
	15.5	17

Third Year

Fall	Credits Spring	Credits
METEO 431 [*]	3 METEO 440W [*]	3
METEO 481	3 METEO 411 [*]	4
STAT 301 or STAT 401	3 METEO 421 [*]	4
General Education Knowledge Domain	3 METEO 482	3
General Education Knowledge Domain	3	
	15	14

Fourth Year

Fall	Credits Spring	Credits
METEO 470 [*]	3 METEO 414	4
METEO 473 or 474 [*]	3 Professional Elective ⁵	3
METEO 436 or 437 ^{*4}	3 Professional Elective ⁵	3
METEO 415	3 Professional Elective ⁵	3
Elective	3 Elective	3
	15	16

Total Credits 121

* Course requires a grade of C or better for the major

‡ 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

¹ Students who begin their studies at non-UP locations and/or join the college after their first year should substitute CAS 100 (GWS), CAS 100A, CAS 100B, or CAS 100C; or ENGL 202C (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.

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⁴ Select 3-6 credits from METEO 473(3) and METEO 474(3).

⁵ Professional elective: Select 6-9 credits from CAS 211(3), EE 477(3) or METEO 477(3); ENGL 416(3), GEOG 333(3), GEOG 361(3), GEOG 362(3), GEOG 363(3), GEOG 417(3), GEOG 467(3), GEOSC 402 IL(3), METEO 413(3), METEO 416(3), METEO 418(3), METEO 419(3), METEO 422(3), METEO 434(3), METEO 451(3), METEO 452(3), METEO 454(3), METEO 471(3), METEO 483(3), METEO 486(1-2, max 3), any two from METEO 495A(3), METEO 495B(3), METEO 495C(3), METEO 495D(3) or METEO 495E(3).

³ METEO 300 can be taken 2nd year spring, if offered online.

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