

B.S. in Applied Meteorology

Prescott Program Requirements

General Education Requirements	38
Core Requirements	46
Program Support Courses	20
Electives	16
Total Credits	120

Program Details

The Bachelor of Science in Applied Meteorology program requires successful completion of a minimum of 120 credit hours. The program may be completed in eight semesters, or four years, assuming appropriate background and full-time enrollment. Students pursuing this undergraduate degree must earn a minimum cumulative grade point average (CGPA) of 2.00 for all work completed at the University. The courses necessary to earn this degree are listed below.

Students should be aware that many courses have prerequisites and/or corequisites and should plan to begin the required calculus sequence as soon as they are eligible. In addition, all meteorology (WEAX) courses, except WEAX 201, WEAX 203L, and WEAX 301, are typically offered once per year, although select courses may be available during summer terms. Students are responsible for ensuring that all prerequisite and degree requirements are met prior to enrollment in advanced coursework.

General Education Requirements

Communication	9
COMM 122 English Composition	
COMM 219 Speech	
COMM 221 Technical Communication	
Humanities - Lower Level	3
Social Sciences - Lower Level	3
Humanities/Social Sciences - Lower or Upper Level	3
Humanities/Social Sciences - Upper Level	3
Computer Science/Information Technology	3
CPSC 118 Fundamentals of Computer Programming	
Mathematics	8
MATH 241 Calculus and Analytical Geometry I	
MATH 242 Calculus and Analytical Geometry II	
Physical/Life Sciences	6
PHYS 226 Physics I	
PHYS 227 Physics II	
Total Credits	38

Core Requirements

WEAX 201	Introduction to Meteorology	3
WEAX 203L	Survey of Meteorology Laboratory	1
WEAX 261	Applied Climatology	3
WEAX 270	Weather Information Systems	3
WEAX 301	Aviation Weather	3
WEAX 353	Thermodynamics of the Atmosphere	3
WEAX 354	Dynamics of the Atmosphere	3
WEAX 363	Thunderstorms	3
WEAX 365	Satellite and Radar Weather Interpretation	3
WEAX 390	Atmospheric Physics	3
WEAX 420	Advanced Atmospheric Thermodynamics	3
WEAX 427	Forecasting Techniques	3

WEAX 490	Advanced Dynamic Meteorology I	3
WEAX 491	Advanced Dynamic Meteorology II	3
WEAX 492	Advanced Synoptic Meteorology	3
WEAX 493	Senior Thesis	3
Total Credits		46

Program Support Courses

CHEM 110	General Chemistry I	3
CHEM 110L	General Chemistry I Laboratory	1
GEOS 210	Introduction to Geographic Information Systems	3
MATH 243	Calculus and Analytical Geometry III	4
MATH 345	Differential Equations and Matrix Methods	4
PHYS 226L	Physics I Laboratory	1
STAT 222	Business Statistics	3
UNIV 101	College Success	1
Total Credits		20

Electives

Choose One of the Following Specified Electives:	3
GEOS 310 Advanced Geographic Information Systems	
MATH 441 Mathematical Methods for Engineering and Physics I	
WEAX 312 Mountain Meteorology	
WEAX 322 Space Weather	
Open Electives	13
Total Credits	16

Suggested Plan of Study

Year One

Requirements	Credits
UNIV 101 - College Success	1
COMM 122 - English Composition	3
PHYS 226 - Physics I	3
PHYS 226L - Physics I Laboratory	1
MATH 241 - Calculus and Analytical Geometry I	4
WEAX 201 - Introduction to Meteorology	3
WEAX 203L - Survey of Meteorology Laboratory	1
Semester Hours	16

Requirements	Credits
GEOS 210 - Introduction to Geographic Information Systems	3
PHYS 227 - Physics II	3
MATH 242 - Calculus and Analytical Geometry II	4
WEAX 353 - Thermodynamics of the Atmosphere	3
WEAX 301 - Aviation Weather	3
Semester Hours	16

Total Credits

Total Hours for All Requirements: 32

Year Two

Requirements	Credits
WEAX 261 - Applied Climatology	3
WEAX 354 - Dynamics of the Atmosphere	3
WEAX 365 - Satellite and Radar Weather Interpretation	3
MATH 243 - Calculus and Analytical Geometry III	4
COMM 219 - Speech	3
Semester Hours	16

Requirements	Credits
WEAX 270 - Weather Information Systems	3
WEAX 363 - Thunderstorms	3
CHEM 110 - General Chemistry I	3
CHEM 110L - General Chemistry I Laboratory	1
MATH 441 - Mathematical Methods for Engineering and Physics I, GEOS 310 - Advanced Geographic Information Systems, WEAX 312 - Mountain Meteorology, or WEAX 322 - Space Weather	3
Social Sciences - Lower Level	3
Semester Hours	16

Total Credits

Total Hours for All Requirements: 32

Year Three

Requirements	Credits
WEAX 420 - Advanced Atmospheric Thermodynamics	3
MATH 345 - Differential Equations and Matrix Methods	4
COMM 221 - Technical Communication	3
CPSC 118 - Fundamentals of Computer Programming	3
Humanities - Lower Level	3
Semester Hours	16

Requirements	Credits
WEAX 390 - Atmospheric Physics	3
WEAX 492 - Advanced Synoptic Meteorology	3
Humanities/Social Sciences - Lower or Upper Level	3
Humanities/Social Sciences - Upper Level	3
Open Elective - Lower or Upper Level	3
Semester Hours	15

Total Credits

Total Hours for All Requirements: 31

Year Four

Requirements	Credits
WEAX 427 - Forecasting Techniques	3

WEAX 490 - Advanced Dynamic Meteorology I	3
STAT 222 - Business Statistics or PSYC 226 - Statistical Analysis for the Social Sciences	3
Open Elective - Lower or Upper Level	4

Semester Hours	13
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Requirements	Credits
WEAX 491 - Advanced Dynamic Meteorology II	3
WEAX 493 - Senior Thesis or 458 - All Hazards Support, Modeling and Mapping	3
Open Elective - Lower or Upper Level	3
Open Elective - Lower or Upper Level	3

Semester Hours	12
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Total Credits

Total Hours for All Requirements: 25