FLORIDA STATE UNIVERSITY SIGNATURE PAGE PROPOSAL FOR A COMBINED BACHELOR'S/MASTER'S PATHWAY

COLLEGE NAME: Arts and Sciences

DEPARTMENT NAME (if applicable): Earth, Ocean and Atmospheric Science

BACHELOR'S DEGREE: (incl. C.I.P. Code and Degree Type): B.S. Meteorology, C.I.P. 40.0401

MASTER'S DEGREE: (incl. C.I.P. Code and Degree Type): M.S. Meteorology, C.I.P. 40.0401

NAME OF COMBINED PATHWAY: BS in Meteorology/MS in Meteorology

CONTACT PERSON: Christopher Holmes

COMBINED PATHWAY DIRECTOR (print name and email):

Christopher Holmes, cdholmes@fsu.edu

APPROVALS:

Christopher Holmes — Digitally signed by Christopher Holmes Date: 2026.09.02 11:01:05 -04'00' — 9/1/2026

Department/School Curriculum Committee — Date

Mike Stukel — Digitally signed by Mike Stukel Date: 2026.09.02 13:21:50 -04'00' — 9/1/2026

Department Chair/Director — Date

Jessica Clark — Digitally signed by Jessica Clark Date: 2026.09.10 17:18:27 -04'00' — 9/10/2026

College Curriculum Committee — Date

Aline Kalbian Digitally signed by Aline Kalbian
Date: 2026.09.14 15:47:37 -04'00'

Academic Dean Date

UPC (Dean of Undergraduate Studies) Date

Dean of The Graduate School (or designee) Date

VP for Faculty Development and Advancement Date

Provost and Executive Vice President for Academic Affairs Date

*If the composition of the combined pathway includes two degree programs from two separate departments or colleges, then please attach two separate signature pages showing the approvals from the different units.

Prior to routing the combined pathway proposal to the Undergraduate Policy Committee (UPC) for signatures, it should be submitted to Mr. James Beck in The Graduate School (jpbeck@fsu.edu) and Dr. Amy Guerette in the Office of Faculty Development and Advancement (aguerette@fsu.edu) for review.

COMBINED PATHWAY PROPOSAL

Combined Bachelor's/Master's Pathways provide academically talented students an opportunity to complete a bachelor's and a master's degree program. These partially-structured pathways allow for up to 12 graduate credit hours to be shared with, or double-counted toward, an undergraduate degree program, as long as that double-counting is considered appropriate by the faculty curriculum committees and academic administrators reflected on the proposal signature page.

PROPOSAL

Proposals should be written in narrative format and must include the following:

Purpose and Justification of establishing the Combined Pathway:

- Units must establish both intellectual and pedagogical reasons for developing the combined pathway, which creates a partially structured path combining two degree programs.
- If the undergraduate and graduate degree programs that are part of the pathway are in different C.I.P. codes, the justification must address the rationale for combining the two different degree programs in detail and must include a second set of signatures from the department and/or college offering the second degree program.
- Proposals must describe the professional/employment benefits that would accrue to combined pathway graduates.

Admission Criteria and Operating Procedures:

- The proposal must clearly describe the admission requirements and specify the timing of admission to the combined pathway.
- Admission criteria must be designed to ensure that only academically talented and motivated students who are able to master graduate work are admitted to the combined pathway.
- Units operating combined pathways are responsible for coding all admitted students in a timely manner, in accordance with Registrar's Office procedures.
- The proposal must describe the advising process for students enrolled in the combined pathway, including how students will be monitored to ensure that they have applied to the graduate degree program at the appropriate time.

Curriculum:

- Outline the proposed pathway, including the required and elective courses for both the undergraduate and graduate degree programs.
- The proposal must identify and justify, both intellectually and pedagogically, specific courses designated as "shared credits."
- A program can only designate and allow up to 12 graduate-level hours of "shared credits."
- Students must earn a 3.0 (B or higher) in the "shared credits" in order for the graduate-level courses to be internally transferred over from the undergraduate to graduate career. Expected course grades must be indicated in this section.
- The proposal must indicate and acknowledge that if a student is admitted into a combined pathway and leaves or opts to pursue a different degree program (not part of the approved combined pathway) that the "shared credits" will no longer apply.
- Complete and attach the "Shared Credits Worksheet." Shared credits are defined as graduate-level courses in the graduate degree program that can be counted toward completion of the undergraduate degree program within the combined pathway.

ADDITIONAL NOTES:

- FSU students normally apply to participate in a combined pathway in their junior or senior year but may apply as early as the second semester of their sophomore year. Students should make formal application for admission to graduate school during the last semester of their senior year, although some departments may have an earlier deadline.

- Students in a combined pathway must meet the standards, as outlined in the *Undergraduate Bulletin*, for undergraduates to take graduate coursework. Specifically, they must have earned a minimum 3.0 FSU GPA and carry no more than 15 credit hours per semester. As long as students have been admitted to the combined pathway, they will be considered pre-approved by the instructor and the dean when requesting graduate course registration from the Registrar's Office.

- The unit must indicate what grades are to be earned in the graduate-level courses taken at the undergraduate-level that can be shared towards the student's graduate degree program. For instance, the unit should indicate a

specific average (of not less than 3.0) and specify the expected letter grades (A, A-, B+, B) in graduate-level coursework (5000 level or above) to be taken and received at the undergraduate level.

- Graduate-level courses that are designated as "shared credits" should be at the 5000-level or above. Directed Individual Study (DIS), internships, or courses given credit-by-examination are not eligible. The "shared credits" will be designated as applicable to the graduate degree program after the student receives the bachelor's degree and matriculates in the graduate degree program.

- Additional, implementation steps will be provided from the Office of Faculty Development and Advancement after the combined pathway has been formally approved by all parties.

Combined Pathway Proposal for B.S. and M.S. in Meteorology

Purpose and Justification of Establishing the Combined Pathway

The combined Bachelor's/Master's Degree Programs in Meteorology provides academically high-achieving students an accelerated and coherent pathway to complete both degrees in a reduced time frame. The pathway allows up to 12 graduate credit hours to be counted toward both the bachelor's and master's degrees. The pathway will be valuable for students who wish to increase their competitiveness for employment and admission to graduate school or wish to deepen their understanding of weather and atmospheric processes.

Intellectually, the combined program ensures that undergraduate students take upper division courses that provide foundational knowledge of meteorology needed for advanced graduate courses and the rigors of graduate study. The 5000-level courses (i.e. shared courses) taken as seniors provide training across multiple areas of meteorology (physical, dynamical, and synoptic) and develop the technical analysis skills needed for success as a graduate student. One of these 5000-level courses (3 credit hours) will substitute for a 4000-level course required for the meteorology bachelor's degree and the other three 5000-level courses (9 credit hours) will count toward the required credit hours of meteorology electives for the bachelor's degree (details below). All four courses that will count for both degree programs are all offered at both the 4000 level and the 5000 level, so students in the combined pathway will get more rigorous and advanced training on course topics that are accessible to undergraduates. The pathway students would take these classes as electives for their undergraduate program at the 5000 rather than the 4000 level and thus these classes would double count. By embedding graduate-level coursework within the senior undergraduate year, the combined pathway provides both efficiency and curricular coherence while maintaining academic rigor.

The undergraduate and graduate degree programs share the same C.I.P. code (40.0401).

Professional/Employment Benefits
Graduates of the combined B.S./M.S. program in Meteorology will gain a competitive advantage in the workforce and Ph.D. programs. Many of our graduates seek careers in operational weather forecasting with the National Weather Service, private weather industry, or insurance industry, where a M.S. degree has become the expected credential. A master's degree also provides an advantage for meteorology positions in finance, environmental consulting, and emergency management, among others. Students who later pursue a Ph.D. and research careers will also benefit from an accelerated timeline to complete their M.S. degree.

Admission Criteria and Operating Procedures

Requirements to apply to the combined pathway
To apply to the combined pathway program, students must

- be in the meteorology B.S. major,
- complete at least 75 credit hours, which typically occurs in fall of junior year,
- complete at least 24 credit hours at FSU for transfer students,
- have a GPA of 3.5 or higher, and
- complete the following pre-requisite courses with a grade of B+ or higher: MAC 2313, PHY 2048C, PHY 2049C, MET 3101, and MET 3231

Students may apply to the program after the semester in which they meet these criteria, by submitting a form (to be created) to the EOAS undergraduate advisor for meteorology. Students will be notified of their acceptance into the program before the start of the semester following their application. Students should meet with an undergraduate advisor in EOAS to determine eligibility and appropriate courses.

Requirements for students in the combined pathway
Students accepted into the combined pathway will meet with an undergraduate advisor to plan their 4000 and 5000-level meteorology courses to ensure they meet undergraduate and graduate program requirements. Students may take 5000-level courses upon acceptance to the combined pathway. To remain in the combined pathway students must

- maintain a GPA of 3.2 or higher in 4000-level meteorology courses
- maintain an overall GPA of 3.5 or higher.
- take no more than 15 credit hours per semester when enrolled in graduate classes as an undergraduate.

Students in the combined pathway should apply to the Graduate School in the fall semester of their senior year. The application requires three letters of recommendation, a personal statement, and official transcript. All students in the combined pathway will satisfy the minimum course expectations for meteorology graduate applicants. For admission as a graduate student in Meteorology, students must have a GPA of 3.2 or higher in upper-division meteorology courses. For 5000-level courses taken as part of undergraduate studies, students must earn a grade of B or higher for courses to count toward the master's degree. Graduate admissions is a competitive process beyond the minimum requirements stated here. Combined pathway students not accepted into the master's program may still use their shared credit hours toward bachelor's degree requirements. After acceptance by the graduate school, students will meet with the Meteorology (G3) Advising Committee and the graduate advisor to discuss their graduate course plan. (This is the advising provided to all incoming graduate students.)

Timeline

1. Students may apply after they have 75 credit hours (typically in fall of junior year), and meet other requirements stated above.
2. Applications will be submitted to the meteorology academic advisor.

3. Qualified students will be accepted before the start of the next semester.
4. Students may take graduate classes after acceptance into the combined pathway (e.g. spring of junior year or fall of senior year).
5. Students should apply to the graduate program in the fall semester of their senior year.
6. Students enter graduate school in 5th year and complete their M.S. degree in that academic year.

Curriculum

This combined pathway program allows 12 graded credit hours taken at the 5000 level to be counted toward both the B.S. and M.S. degrees in meteorology.

The B.S. degree in Meteorology requires completing 120 credit hours, including at least 27 credit hours of required core meteorology courses (MET 3101, MET 3220C, MET 3231, MET 4301, MET 4400C, MET 4420, MET 4500C, MET 4501C), 12 credits of meteorology electives, 33 credits of collateral math and science courses (CHM 1045 and lab, PHY 2048C, PHY 2049C, MAC 2311, MAC 2312, MAC 2313, MAP 2302 or MAP 3305, and STA 3032 or STA 4442 or STA 4321), and university general education requirements.

The M.S. degree in Meteorology has thesis and coursework-only options, both of which are available to students in the combined pathway. The coursework-only degree requires completing 32 credit hours, including at least 21 credits from letter-graded courses, 3 credits of supervised research (MET 5910r), 2 credits of seminar (MET 5930), and a comprehensive exam (MET 8966r).

Students accepted into the combined pathway program will take the following 5000-level courses that count towards the requirements for both the bachelor's and master's degrees.

- MET 5312 Advanced Dynamic Meteorology II
- MET 5403C Meteorological Instrumentation and Observations (in lieu of MET 4400C)
- MET 5451 Advanced Atmospheric Physics II
- MET 5533 Tropical Meteorology I

These courses are each 3 credits and total 12 credits. MET 5403C will substitute for the required undergraduate course MET 4400C. The others will contribute to the meteorology electives required for the bachelor's degree.

After completing these courses with a B or higher, acceptance by the graduate school, and completion of the bachelor's degree, these courses will count toward the requirements for the master's degree. If the student in the combined pathway leaves or opts to pursue a different degree program that is not part of this combined pathway in meteorology, the credits will no longer be double-counted toward the B.S. and M.S. degrees.

Justification of shared courses

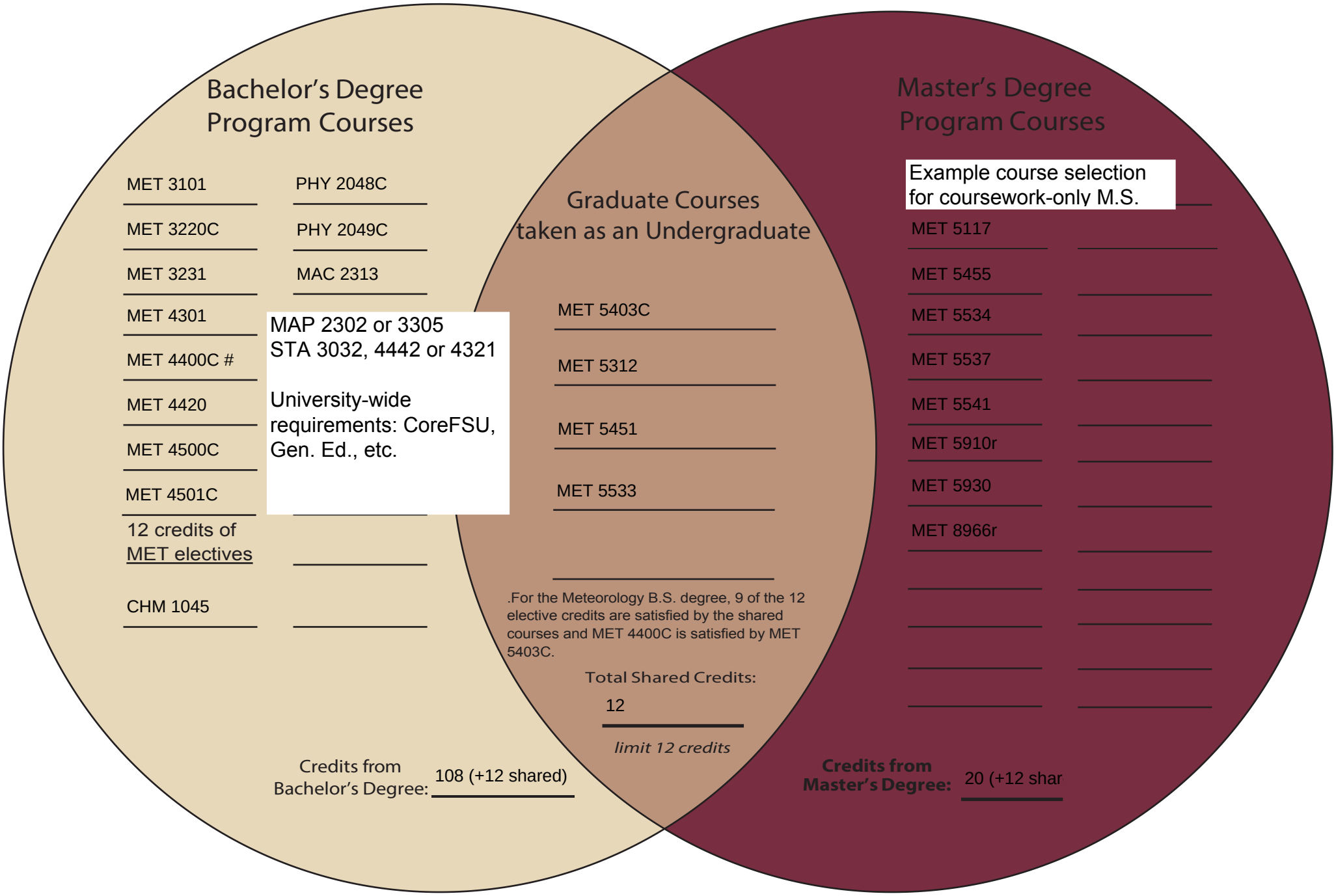
The graduate courses to be taken by undergraduates in the program provide broad foundational knowledge across areas of meteorology and particular exposure to tropical meteorology, which is the most common focus area and career interest of meteorology graduate students.

Example selection of courses demonstrating overlap:

Bachelor's degree program courses (120 hours total with shared courses)	4 Graduate courses (12 hours) taken as an undergraduate	Master's degree coursework-only program courses, (32 hours total with shared courses)
Required Meteorology courses MET 3101 MET 3220C MET 3231 MET 4301 MET 4400C # MET 4420 MET 4500C MET 4501C	MET 5403C Meteorological Instrumentation and Observations MET 5312 Advanced Dynamic Meteorology II MET 5451 Advanced Atmospheric Physics II MET 5533 Tropical Meteorology I	Example Selection MET 5117 Regional Hydroclimatology MET 5455 Cloud Physics MET 5534 Tropical Meteorology II MET 5537 Atmospheric Convection MET 5541 Dynamical Weather Prediction
Meteorology Electives 12 credits #		
Required courses in other departments CHM 1045 PHY 2048C & 2049C MAC 2313 MAP 2302 or 3305 STA 3032, 4442 or 4321		Other requirements MET 5910r Supervised Research MET 5930 Seminar MET 8966r Comprehensive Exam
Other university requirements		
108 (minimum)	12	20

For the Meteorology B.S. degree, 9 of the 12 elective credits are satisfied by the shared courses and MET 4400C is satisfied by MET 5403C.

Combined Bachelor's/Master's Pathway



Total Combined Pathway Credit Hours: 140 (108 BS + 20 MS + 12 shared)