1. Name of the programs or majors
   Meteorology
   Business Administration

2. Name of the degrees
   Bachelor of Science in Meteorology
   Master of Business Administration

3. Name of the department(s) which administer(s) the program
   Department of Geological & Atmospheric Sciences, College of Liberal Arts and Sciences
   Department of Business Administration, Ivy College of Business

4. Rationale for the concurrent degree program
   According to the American Meteorological Society, “One of the fastest growing areas for meteorologists is the private sector. There are increasing employment opportunities for meteorologists in industry, private consulting firms, and research organizations. Private sector meteorologists provide a variety of services to industries and other organizations. Some are consulting meteorologists with their own companies and others worked for corporations. In recent years, a rapidly growing specialty in meteorology has been in the area of information services. Private companies have developed computerized information systems to provide specialized weather data and displays.”

   Meteorology majors interested in management careers in the atmospheric sciences profession will benefit from earning the MBA while still at Iowa State instead of later interrupting their careers to pursue the advanced business degree. The MBA will help prepare meteorology students, choosing to work in the private sector, for long-term career success.

5. Admission procedures and requirements
   The Meteorology/MBA concurrent degree is a rigorous 5-year program, and admission is selective. Candidates are expected to exhibit superior intellectual ability, strong leadership attributes, and must be highly motivated and career-focused. Significant internship/co-op experience is expected.

   Meteorology students interested in the concurrent degree program must apply to the MBA no later than July 1 the summer prior to their senior year. MBA admission is only considered for fall semester entry.

   The following application materials are required:
   - Application for an ISU Undergraduate Student Wishing to Pursue a Concurrent Graduate Degree
   - Official transcripts
   - GMAT (preferred) or GRE scores
   - Letters of recommendation (2)
   - Essays (2)
   - Resume
   - Admissions interview (by invitation only)
6. Requirements of the program
   Degree requirements for the BS in meteorology and the MBA are unchanged in the proposed
   Meteorology/MBA concurrent degree. The BS in meteorology and the MBA require a minimum of
   120 credit hours and 48 credit hours respectively. A maximum of twelve approved credit hours
   may be applied toward both the BS and MBA degrees.

7. Expected enrollment
   2-3 students per year.

8. If not already addressed, answer the following:
   a. How will the undergraduate degree plan and graduate program of study be developed?
      Meteorology students will work with their undergraduate advisor and the MBA
      academic advisor to develop a program of study for the Meteorology/MBA.
   b. When will the student have a major professor?
      Upon entry to the Meteorology/MBA concurrent degree (i.e., fall semester of senior year)
   c. Will graduate assistantships be provided?
      Students will be eligible for a graduate assistantship; however assistantships are highly
      competitive and not guaranteed. The Ivy College of Business offers merit-based
      scholarships to exceptional concurrent MBA students in the various STEM majors.
   d. Will a thesis be required?
      The Master of Business Administration is a coursework-only degree.
   e. Who will be responsible for the administration of the program?
      Sven Morgan, Professor and Chair, Department of Geological & Atmospheric Sciences,
      251 Science, smorgan@iastate.edu, 294-1837
      Russ Laczniak, Associate Dean for Graduate Programs and Research, 2200 Gerdin,
      laczniak@iastate.edu, 294-9692
   f. How much time is required to complete the program? Show a sample semester-by-
      semester plan.
      The Meteorology/MBA concurrent degree program is designed to be completed in a
      minimum of five academic years or ten semesters. In the first three years, meteorology
      students take their prescribed course requirements. The final two years are comprised of
      the remaining meteorology major coursework and the MBA program requirements.
   g. Will students be allowed to double count credits? If so, how many?
      Twelve credits.

9. Attach memos showing approval by appropriate department and college committees, faculty, and
   administrators.

10. Proposal Contact
    William Gallus, Professor, Department of Geological & Atmospheric Sciences, 3025 Agronomy,
    wgallus@iastate.edu, 294-2619
    Russ Laczniak, Associate Dean for Graduate Programs and Research, 2200 Gerdin,
    laczniak@iastate.edu, 294-9692
<table>
<thead>
<tr>
<th>Degrees</th>
<th>Semester 1</th>
<th>Semester 2</th>
<th>Semester 3</th>
<th>Semester 4</th>
<th>Semester 5</th>
<th>Semester 6</th>
<th>Semester 7</th>
<th>Semester 8</th>
<th>Semester 9</th>
<th>Semester 10</th>
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</thead>
<tbody>
<tr>
<td>BS in Geology</td>
<td>CHEM 163 or CHEM 177</td>
<td>PHYS 221</td>
<td>PHYS 222</td>
<td>STAT 105</td>
<td>MTEOR 311</td>
<td>MTEOR 443</td>
<td>MTEOR 454</td>
<td>MTEOR 417</td>
<td>MTEOR 499</td>
<td>MTEOR Elective</td>
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<tr>
<td>CHEM 163L or CHEM 177L</td>
<td>CHEM 163L or CHEM 177L</td>
<td>MTEOR 206</td>
<td>MTEOR 227</td>
<td>MTEOR 301</td>
<td>MTEOR 341</td>
<td>MTEOR 342</td>
<td>MTEOR 411</td>
<td>MTEOR 432</td>
<td>MTEOR Elective</td>
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<tr>
<td>MATH 165 Calculus I 4 cr.</td>
<td>MATH 166 Calculus II 4 cr.</td>
<td>MATH 265 Calculus III 4 cr.</td>
<td>MATH 266 Diff. Equations 3 cr.</td>
<td>Foreign Lang./Elective 4/3 cr.</td>
<td>Foreign Lang./Elective 4/3 cr.</td>
<td>Foreign Lang./Elective 4/3 cr.</td>
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<tr>
<td>ENGL 150 Crit. Thinking</td>
<td>SSH Choice</td>
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<td>3 cr.</td>
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<tr>
<td>MTEOR 111 Synoptic Appl. 1 cr.</td>
<td>MTEOR 201 Intro. Seminar R cr.</td>
<td>MTEOR 206 Climate 1 cr.</td>
<td>MTEOR 227 Comp. Program. 3 cr.</td>
<td>MTEOR 301 General Mteor. 4 cr.</td>
<td>MTEOR 341 Atmos. Physics I 3 cr.</td>
<td>MTEOR 342 Atmos. Physics II 3 cr.</td>
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<td>MTEOR 112 Orientation 1 cr.</td>
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<td>SSH Choice 3 cr.</td>
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<td>LIB 160 Info. Literacy 1 cr.</td>
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<td>MBA 48 credits (minimum)</td>
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<tr>
<td>BUSAD 502 Quant. Analy. 3 cr.</td>
<td>FIN 501 Finance 3 cr.</td>
<td>MGMT 503 Bus &amp; Society 3 cr.</td>
<td>MBA Elective 3 cr.</td>
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<td>ACCT 501 Accounting 3 cr.</td>
<td>MKT 501 Marketing 3 cr.</td>
<td>MGMT 504 Strategy 3 cr.</td>
<td>MBA Elective 3 cr.</td>
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<tr>
<td>ECON 532 Mgrl Econ. 3 cr. (SSH Choice)</td>
<td>SCM 501 SCM 3 cr.</td>
<td>MBA Elective 3 cr.</td>
<td>MBA Elective 3 cr.</td>
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<tr>
<td>BUSAD 592 Prof Skills I R cr.</td>
<td>BUSAD 594 Prof Skills II R cr.</td>
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<tr>
<td>BS Meteor 121 cr.</td>
<td>18/18 cr.</td>
<td>15/33 cr.</td>
<td>15/48 cr.</td>
<td>16/64 cr.</td>
<td>15/79 cr.</td>
<td>16/95 cr.</td>
<td>9/104 cr.</td>
<td>6/110 cr.</td>
<td>8/118 cr.</td>
<td>6/124 cr.</td>
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<tr>
<td>MBA 48 cr.</td>
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<td>Shared Cr. (9)</td>
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<td>Total 160 credits</td>
<td>18/18 cr.</td>
<td>15/33 cr.</td>
<td>15/48 cr.</td>
<td>17/64 cr.</td>
<td>15/79 cr.</td>
<td>16/95 cr.</td>
<td>18/113 cr.</td>
<td>18/131 cr.</td>
<td>17/148 cr.</td>
<td>15/163 cr.</td>
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Notes:
- Students taking CHEM 177 should plan to take CHEM 178 as well.
- Nine credits may be applied to both the BS in Meteorology and the MBA including ECON 532 (SSH Choice), MTEOR 411, and MTEOR 417.
- ECON 101 is recommended as a Social Sciences choice course as a prerequisite to ECON 532 in the MBA program.
- Twelve credits of MBA electives must be 500 level courses from the Ivy College of Business.
MEMORANDUM

Date: 6 November 2018
From: Dr. James Aanstoos, chair GE-AT Curriculum Committee

Subject: Proposal for Concurrent BS in Meteorology and MBA degrees

I wholeheartedly support and approve the proposal for an option for Meteorology students to pursue concurrently in a five year plan both the BS in Meteorology and MBA degree. Meteorology majors interested in management careers in the atmospheric sciences profession will benefit from earning the MBA while still at Iowa State instead of later interrupting their careers to pursue the advanced business degree. The MBA will help prepare meteorology students choosing to work in the private sector for long-term career success.
The LAS Curriculum Committee reviewed and approved the proposed Concurrent BS Geology/MBA and the proposed Concurrent BS Meteorology/MBA. Please note the following:

- The proposed course plans use ECON 532 toward fulfillment of the LAS Social Sciences General Education requirement for the Bachelor of Science. The use of this course has been approved by the Department of Economics Curriculum Committee and the LAS Curriculum Committee for use by these two specific programs. This specific approval was necessary because LAS policy states that courses numbered 500 and above cannot be applied to the general education group requirements.

- The proposed course plans rely on double-counting 12 credits. While the LAS Curriculum Committee is comfortable with the course make-up of the programs, we do understand that the credit overlap is non-compliant with the Graduate College rule and that it is the Graduate College’s purview to waive the requirement.