The Certified Digital Meteorologist (CDM) Program
(September 2023)

These procedures govern all aspects of the Certified Digital Meteorologist program for new applicants.

1. The Certified Digital Meteorologist (CDM) Program

The Certified Digital Meteorologist (CDM) Program was inaugurated on 15 September 2023. The CDM designation is granted to meteorologists who meet established criteria for scientific competence and effective communication skills in their weather presentations on all forms of digital platforms. The general public has confidence in the quality and reliability of weather presentations made by meteorologists who have been certified by the AMS. Digital meteorologists may be a source of other science-based information.

In order to acquire a CDM, an individual must hold a degree in meteorology (or equivalent) from an accredited college/university.

Meteorologists who qualify for a CDM include those who produce graphical information, produce content in a digital format, and/or provide independent consultation on a digital format like a private website or social media.

2. Board of Digital Meteorologists

This Board is a standing committee of the Society under the Commission on Professional Affairs. It is responsible for considering applications and making recommendations to the Commissioner for review and final decision in regard to certification. The Board will consist of eight certified members* who do not hold elective office in the Society and who contribute their time and interest to the program. An attempt should be made to ensure that no member is professionally employed by the same organization as another member during tenure on the Board. Members are appointed by Council action for terms of three years. In order to ensure the fairness of the examination procedures, the Board has adopted the policy that its members will avoid conflicts of interest in the evaluation process. Members will continue to avoid such conflicts by disqualifying themselves from evaluating competitors or business associates when such relationships would interfere with their impartiality.

3. Procedures for Certification

Application to the AMS CDM Program requires a three-step process that shall be made in the following order:

1) Candidates must complete an online application form. Applications will be accepted only from individuals who hold a bachelor's or higher degree in atmospheric science or meteorology (or the equivalent) from an accredited college/university. The acceptability of the equivalency of the degree will be determined by the Society, with oversight from the Board on Higher Education. A list of required courses may be found on the AMS Website.

2) The CDM applicant must pass a "closed book", qualifying examination referred to as the "CBM/CDM Exam" to demonstrate knowledge of general meteorology. Each CBM/CDM Exam will be generated from a pool of approximately 600 questions. A test of 100 multiple choice and true/false questions will be administered by Prometric/SMT testing center. Applicants must have a grade of 75 or higher in order to pass the written exam.

To assist applicants in passing the CBM/CDM exam, a study guide for the examination may be found on the AMS Web.

3) Applicants successfully satisfying requirements 1 and 2 will then send samples of their work for review by the Board of Digital Meteorologists.

a. Selection of evaluation panel

A panel consisting of the Chairperson of the Board and five other members of the Board will constitute the reviewing panel for the applicant. Each member shall certify that he or she is aware of no conflict of interest in reviewing the applicant; if the Chairperson has such a conflict or otherwise deems it necessary to recuse himself/herself from the process, then the panel's evaluation will be submitted directly to the Commissioner of Professional Affairs for review and final decision. The applicant will be notified in writing of the names and occupations of the members selected and will be given an opportunity to object to any of the Board members selected. An applicant shall be required to state in writing the reasons for any objection to any member of the panel. The Chairperson may either accept the objection from the applicant or refer the question to the Commissioner for final decision; the Commissioner shall act on the preponderance of the evidence. All applicants shall be notified that unless an objection is received within 15 days, the Society will assume that the selected Board members are satisfactory to the applicant and will proceed to the next step.

Applicants may choose to send their work samples in Spanish. All written communication with applicants will be done in English. The procedure for an objection to any member of the panel is referenced above.

b. Submission of evaluation materials

The Chairperson will request the applicant to submit work samples from at least 2 of the 3 below categories, for a total of 6 points. Applicants may submit up to 10 points of work samples in case they're unsure if one of their samples is unsatisfactory. All work samples must be time stamped within 2 months before and after an application is approved. For example, if an application is approved in July, samples must have been produced by the applicant between May and September. The categories are as follows:

1) Text discussions, video forecasts: 4 points

Text discussions: Are forecast based, with the applicant's own forecast and reasoning behind it in a clear manner. There must be depth to the content submitted. An active and routine forecast must be submitted.

Live streams or recorded videos: Both are accepted forms of content, ranging from 1 to 15 minutes. The reviewers will account for the lack of premium weather graphics (IBM, AccuWeather, Baron) technology. One active and one routine forecast must be submitted. Graphics must be legally available for their commercial use.

2) Hard journalism stories, data or explainer story, weather graphics: 2 points

Journalism Story: These stories will use sourcing, a strong theme and high focus to talk about a community. Content can be submitted via audio, video, or writing. Examples include impacts of coastal flooding on a community, rebuilding in the aftermath of a tornado or showing how great weather for tourist season helped the economy.

Data or Explainer Story: These stories will typically use research, analytical skills, and a strong focus to explain a certain weather event of phenomena. Content can be submitted via audio, video, or writing.

Direct sourcing from experts in the field may be used as well. Examples include a recap of a major storm, teaching atmospheric optics or using climatology to show how climate change has impacted a region.

Weather Graphics: A standalone graphic, a sequence of slides or animated graphics can be used to attain these points. It is OK if these graphics were used on broadcast

television, video discussions or text discussions. However, this graphic must not be used in any other submission.

Content from professional weather data systems (IBM MAX, AccuWeather, Baron, etc.) or from designer applications (Adobe Premiere, Adobe Photoshop, PowerPoint, etc.) are accepted.

3) Social media posts: 1 point

Three social media posts must be submitted to earn the point, each concerning a different weather event. Posts can, but do not have to, be from a mix of social media platforms, or from the same. A Tweet thread will count as one post.

Social media videos that are clearly different from other forms of traditional video content are acceptable. For example, Instagram Reels and TikToks are allowed, as well as other native vertical video content that is uploaded into a social media platform.

Applicants must indicate if the social media post is a text forecast discussion, a video forecast discussion, data or explainer story. The submissions will then carry the same treatment as the rubrics listed in the applicable section above.

Links to a video or story are allowed but will only be reviewed to make sure that it is relevant to the story. It will not be graded.

The board will review the applicant's social media portfolio to ensure professional conduct. Not every post will be looked at but an arbitrary amount of content will be reviewed by the graders.

c. Grading process

The applicant uploads their work samples and the evaluation panel will review the submissions based on the following criteria:

Text Discussion: Accuracy, Readability, Weather Concepts, Spelling/Grammar
Video Discussion: Accuracy, Graphical Content, Explanation, Presentation
Journalism Story: Storytelling, Sourcing, Readability
Data/Explainer Story: Storytelling, Sourcing, Accuracy, Readability
Weather Graphics: Accuracy, Explanation, Presentation
Social Media: (grading based on which of the above categories the post falls into)

Grades will be awarded for each area on a scale of 5.0, as follows:

5.0 Excellent
4.0 Very Good
3.0 Fair
2.0 Substandard
1.0 Poor

Each panel member, except for the Chairperson of the Board, will submit a grade for each work sample. The grades given by all reviewers will be averaged. A candidate must score above a 3.0 average on each work sample in order to succeed on the evaluation.

Panel members' scores shall be compiled and reviewed by the Chairperson, who will make a recommendation to the Commissioner of Professional Affairs for review and final decision. If the Commissioner deems it necessary to recuse himself/herself from the process because of a

conflict of interest or otherwise, then the Secretary-Treasurer shall notify the applicant of the panel's evaluation.

4. Fees

Fees are available on the AMS website.

5. Notification

1) Successful applicants will be notified by letter. In addition, they will have access to a press release from Society headquarters for possible use.

2) Unsuccessful applicants will be notified by letter from the Society. The letter shall contain a statement from the Commissioner of Professional Affairs, explaining the failure and suggesting ways of improving the performance based upon the information received from Board members. Unsuccessful applicants may reapply after a period of three months from the date of the negative notification. Please see the attached schedule for applicable fees. After a second unsuccessful application, there will be a six-month waiting period before a third application can be submitted. However, if more than two (2) years have passed from the date of the negative notification on the applicant's initial application, then the second application shall be deemed a new application.

Unsuccessful candidates may appeal the negative decision of the Board of Digital Meteorologists to the Executive Committee of the Society within 90 days of the date of notification. Please see the attached schedule for applicable fees.

6. Procedures for recognition of continuing professional development

One of the purposes of the CDM program is to provide an incentive for the continued professional growth of the meteorologist. In September 2003, the AMS Council approved the addition of a mandatory continuing professional development component for all of the Society's certification programs to be administered by each program's respective Boards. The procedures for submitting professional development activities to satisfy the requirements under the CDM program are provided below.

The Program to Recognize Continuing Professional Development by CDM is based on the development and maintenance of a "Professional Portfolio" by each individual CDM. A Professional Portfolio consists of an extensive list of activities and accomplishments related to an individual's professional career. This list was developed from input submitted by the CDM community. Each activity is assigned a Professional Development Score (PDS). To maintain active status, a CDM has to amass a total of 28 PDS points in a portfolio of continuing professional development during a five-year period, which must be submitted no later than the end of the fifth calendar year after the year in which the CDM received his or her certification or the year of the most recent submission of his or her portfolio.

The list of recognized professional activities and their PDS values is provided online. A CDM can review or update his or her portfolio by logging onto the CDM Web page on the AMS Web site using the username and password created in the CDM's AMS membership profile. This Web site will allow the CDM to update his or her portfolio by filling in the appropriate cells on a preformatted form. To protect client confidentiality, specifics of many activities will not be required. Each CDM should keep personal records, however, that will provide tangible evidence of accomplishments in case their records are selected for audit. CDMs who do not have ready access to the Internet can file a paper copy of the portfolio information form with the AMS. AMS Headquarters staff will then enter it into the portfolio database.

Each activity listed must have occurred within the last five years. The portfolio database will be maintained at the AMS Headquarters. When a CDM wishes to have his/her portfolio evaluated to fulfill the five-year professional development requirement, he/she initiates the submission of the current portfolio through the AMS Website. Each portfolio will be confidential. Only the filing CDM, the Chair of the CDM Board or designee, and appropriate AMS Headquarters staffers will have access to an individual portfolio (except in the case where a CDM seeks an appeal). The

submission of portfolios will be an automated process adding an additional level of security to the portfolios.

The portfolio Web site will, for each CDM logging into his or her portfolio, include a running total of the number of PDS points accumulated since the CDM's certification was granted or the most recent submission of the portfolio. After a successful submission — that is, one with a portfolio containing at least 28 PDS points accumulated in the past five years — a new, clear, portfolio will be initialized and the date for the five-year professional development period will be reset.

Audits

No less than 5% of the portfolios submitted each year will be randomly selected to be audited as a means of evaluating the program. The audits are conducted in the calendar year immediately following when they are submitted. CDMs are to submit their portfolio every five years. Submitting a portfolio more frequently than five years will increase the chance of being audited.

Outside of the random selection procedures, an audit of a CDM's portfolio may be requested by any member of the Society. The request must be made in writing with justification to the Chair of the Commission on Professional Affairs. The Chair may dismiss the request with notice and a statement of reasons to the individual making the request. If the Chair approves the request, such an audit would not count against the 5% cap.

Instructions for conducting an audit:

1. The Chair of the Board of Digital Meteorologists may delegate one board member to conduct the audits each year.
2. To initiate the process, the AMS notifies the CDM that they have been selected for audit with an explanation for how the audit will be conducted.
3. No action will be required by the audited CDM upon notification. Any questions regarding the audit by the CDM will be referred to the CDM Chair, who should respond in 10 days.
4. Audits should begin within 10-30 days after the CDM is notified and completed within 90 days.
5. Audits will be conducted with the assumption that the CDM has truthfully, and in good faith entered activities they successfully completed over the period of record. Therefore, the CDM Board Chair's (or delegate's) primary audit responsibilities include:
    a. Ensuring the portfolio contains enough entries to fulfill the 28 point criteria.
    b. Ensuring there are no duplicate entries.
    c. Validating the point amount for each entry.
6. Note that there is no need for the audit to review every entry in the record. The audit can be completed once the minimum of 28 valid points are accounted for. If there are issues associated with items outside the core needed for 28, they can be pointed out to the CDM for correction but don't need to impact the pass/fail determination.
7. If, in the opinion of the delegate, no aspects of the portfolio show cause for concern, the audit will be recorded as a PASS and the CDM will be notified of such.
8. If an issue or concern is identified in the course of the audit:
    a. The issue will be communicated by the CDM Chair to the CDM whose portfolio is being audited with a detailed explanation and offer to work with the CDM for a resolution.
    b. The audited CDM will have 30 days to respond with additional information or documentation as appropriate.
    c. If the additional information satisfies the concern, the audit will be recorded as a pass with notification in writing to the CDM by the CDM Chair.
    d. If the CDM Chair is uncertain whether the additional information satisfies the concern, the Chair will form an ad hoc committee comprised of three members of the Board to review the portfolio and all associated communications with candidate along with documentation

provided, and provide a pass/fail recommendation with rationale to the full Board for a decision by majority vote.

9. If the Board decides that the audit result is a fail, the Board will recommend to the AMS through the Professional Affairs Commissioner that the CDM should be placed in Inactive status.
10. The CDM may appeal the Inactive status decision in writing (stating the reasons for the appeal) to the AMS Executive Committee, 45 Beacon St., Boston, MA 02108-3693.

7. Maintaining the list of acceptable continuing professional development activities

The list of recognized professional activities and their PDS values will be reviewed at least annually by the Board Chair for its relevance to the normal activities of a CDM, and revisions will be made as appropriate. Any active CDM can send a request to the Board Chair to have a specific activity considered for inclusion on the list or for the PDS point value of an existing activity. Each such request will be vetted by the Board of Digital Meteorologists, who may seek external review and recommendation as they feel appropriate, and a decision on each suggested change will be made by majority vote of the Board. When a rule change is made, the CDM will be given the benefit of either the old or new rule as long as the activity was carried out prior to the end of the calendar year in which the change was made.

8. Renewal, Inactive status, and reactivation

Certification is for a period of one year, and can be renewed annually. Please see the attached schedule for applicable fees. Renewals are billed by the AMS in conjunction with annual membership and subscription notices. If an individual fails to renew certification within 6 months of the expiration date or fails to achieve an acceptable level of continuing professional development during the five-year period following certification or the completion of the most recent continuing professional development period, the certification will be considered Inactive. In addition, a CDM who has been out of the business for more than 5 years will be considered Inactive.

Inactive CDMs cannot practice as CDMs or market/promote themselves as CDMs. Those wishing to acknowledge their past active CDM status in resumes may do so, but must list the years from initial certification to when they lapsed into Inactive status.

Reactivation of an Inactive certification can be obtained under the following situations:

1) If the certification has become Inactive due to failure to pay the renewal fee, and has been Inactive for less than five years, active status can be obtained by paying the renewal fee for the Inactive year(s) and the current renewal. If it has been Inactive for five years or more, the individual is required to submit samples of their work (but no additional fee) for review by the Board Chair in accordance with the above criteria.
2) If the certification has become Inactive because insufficient continuing professional development activities had been completed in the required five-year continuing professional development period, and the certification has been Inactive for less than three years, the certification can be reactivated upon completion of sufficient continuing professional development activities in the five year period preceding the request for reactivation and with the payment of the renewal fee for the Inactive year(s) and the current renewal. If it has been Inactive for three years or more, the individual is required to submit samples of their work (but no additional fee) for review by the Board Chair in accordance with the above stated criteria.
3) If the individual has become Inactive to due to a failure to hold a position in the field for more than five consecutive years, he/she must submit samples of their work (but no additional fee) for review by the Board Chair in accordance with the above stated criteria.

9. Appeal of Inactive status

A CDM whose certification has become Inactive through any means other than nonpayment of the renewal fee, including as the result of a review of his or her portfolio of continuing professional development, may seek an appeal of the Inactive status by written request to the Chair of the Commission on Professional Affairs within 90 days of notification of placement on the Inactive CDM list. The request for appeal should include all supporting documentation needed to review the request. In cases of extenuating circumstances beyond the control of the CDM (such as a military reservist being called to active duty) the Chair of the Commission on Professional Affairs may grant an extension of active status for a one-year period. Economic hardship is not grounds for appeal by a CDM that has been moved to Inactive status.

A CDM whose appeal of Inactive status has been denied by the Chair of the Commission on Professional Affairs may, within 90 days of notification of the denied appeal, appeal that action in writing to the Executive Committee of the Society (see Organizational Procedures of the AMS).

10. Publication of CDM status

While the individual professional portfolios will be confidential, the AMS Web site will post a list of all CDMs and their current status as “Active” or “Inactive”. Each status type will be clearly defined.

11. Suspension or revocation

1) The AMS reserves the right to suspend or revoke the right to use the CDM Seal if the CDM, in the conduct of his or her profession, clearly fails to conduct himself or herself in a manner that reflects the dignity and honor of the profession or if a CDM fails repeatedly to adhere to the criteria for the certification.

2) Any complaint that may be grounds for suspension or revocation of the CDM Seal under section 1) shall be sent to the Society. The Society may summarily dismiss a frivolous complaint with notice and a statement of reasons to the complainant. Otherwise, the Society shall send a copy of the complaint to the Chairperson of the Commission on Professional Affairs, the Chairperson of the Board of Digital Meteorologists, and the CDM.

3) The Chairperson of the Board of Digital Meteorologists may resolve any complaint by any appropriate informal means, which may include contacting the CDM in question in an effort to resolve by mutual agreement the subject of the complaint.

4) Any complaint not disposed of by informal means shall be determined as follows:

   a. With the concurrence of the Chairperson of the Commission on Professional Affairs, a copy of the complaint shall be sent to the CDM in question by the Board Chairperson, together with a copy of the procedure for suspension or revocation of the CDM Seal and the names and brief descriptions of the members of a Fact-Finding Panel appointed under Sub-Paragraph 2.

   b) The Board Chairperson shall select three members of the Board, who will constitute a Fact-Finding Panel to determine the issues raised in the complaint. Each member of the Fact-Finding Panel shall certify to the Chairperson that he or she is aware of no conflict of interest in accepting the appointment to the Fact-Finding Panel. The CDM in question shall have the opportunity within 15 days of the date of notification to object to any member of the Fact-Finding Panel. The CDM shall be required to state in writing the reasons for any objection to a member of the panel. The Chairperson may either accept the objection from the CDM or refer the question to the Chairperson of the Commission on Professional Affairs for final decision.

c) The CDM shall cooperate fully with the Fact-Finding Panel and produce any tangible information relevant to the issues raised in the complaint and shall attempt to secure for the Fact-Finding Panel copies of work samples in issue. The CDM may submit to the Fact-Finding Panel any other information he or she deems relevant, including copies of other work samples and a written answer to the complaint.

d) After the submission of the tangible evidence to the Fact-Finding Panel, if any facts remain in dispute, a hearing shall, upon written request of the CDM, be held by the Fact-Finding Panel upon adequate notification to the CDM and at a time and place convenient to the members of the panel and the CDM. The hearing shall be conducted according to fundamental concepts of due process recognized as fair and followed by administrative agencies in the conduct of adjudicatory hearings, which shall include the right to counsel, presentation of witnesses, right to cross-examination, and the right to record the proceeding by either stenographic or tape-recording means. Strict rules of evidence shall not apply, but the panel shall accept information or evidence that is customarily relied upon by reasonable people in the conduct of serious affairs.

e) The Fact-Finding Panel shall make written findings of fact and shall determine if the CDM has, in the conduct of his or her profession, clearly failed to conduct himself or herself in a manner that reflects the dignity and honor of the profession, or if the CDM has failed repeatedly to adhere to the criteria for the award of the CDM Seal.
If the Fact-Finding Panel determines that the CDM has failed in his or her conduct or adherence to the criteria as aforesaid, then the Fact-Finding Panel shall include in its written decision its findings on the degree of severity of the matter and a recommendation for the imposition of sanctions, which may include:

i. a written informal admonition by the Chairperson of the Commission on Professional Affairs, a copy of which shall be retained in the CDM's personal file; or
ii. a suspension of the CDM's right to use the CDM Seal for a period of time; or
iii. a revocation of the CDM's Seal.

f. The written decision of the Fact-Finding Panel shall be sent to the Chairperson of the Board of Digital Meteorologists, the Chairperson of the Commission on Professional Affairs, and the CDM. The Chairperson of the Board of Digital Meteorologists and the Chairperson of the Commission on Professional Affairs, after a review of the decision, shall jointly determine in their judgment the appropriate sanction and administer the same.

5) A CDM against whom action has been taken may, within 30 days of the date of notification of the action, appeal the action in writing to the Executive Committee of the Society (see Organizational Procedures of the AMS).

*The initial board was recommended by the Commissioner of Professional Affairs and approved by AMS Council.