

Outline of USMA Presentation

Online Wednesday, February 15, 2023
7:00 PM EST By Don Jordan, USMA Eastern Director

I. Introduction & Overview

by Elizabeth Benham

Technical Advisor to USMA, NIST

Intro to CMS, Stats, CMS overview, Exam Questions, Lifetime member

II. The South Carolina CMS Program
(inactive at present)

III. How to take the CMS and/or CAMS
Exam

IV. Suggesting for USMA website wrt CMS

V. Committee to study the CMS and CAMS
Exams, (Need Volunteers)

VI. Procedure to Study CMS and CAMS
Exams. Discussion of Online Exams

The South Carolina CMS Program

By Dr. Don M. Jordan

The USMA CMS Program is designed to provide documentary evidence for individuals who can qualify as metric specialists because of their education and experience in the use of the modernized metric system—known as SI (*systeme international d'unites*).

The CMS program is structured to help maintain professional standards in the field of metrication. With the United States' conversion to SI, companies, schools, agencies, businesses, and other facilities will seek personnel who, in addition to their job skills, are knowledgeable about SI. The USMA CMS Program is designed to give both employers and employees the documented evidence that an individual's qualifications have been carefully screened to verify that he or she has the background and ability to use the SI version of the metric system correctly.

The South Carolina version of the CMS Program encourages each school superintendent in the state to recommend one person from his/her district to be certified. Ideally, we want each of the over 2,000 schools in the state to have on their staff a certified metric specialist.

Note: This program has been inactive for several years.

Names of successful candidates will be added to all USMA lists and, for SC educators, names will be published in both the *SCJAS Newsletter* and the *SCAS Newsletter*. Names will also be forwarded to the State Department of Education, the Commission on Higher Education, and the United States Department of Commerce.

**Example from Graduate Course SMED 739 or
Math & Science Conference**

The CMS Program is proud to announce the following who recently have been granted CMS status.

| | |
|-------------------|---|
| Shanise Brown | Hand Middle School Cert # 387 |
| Linda M. Jackson | Caughman Rd. Elementary Cert # 388 |
| Bobbi Sue Wrenn | Southeast Middle School Cert # 389 |
| Kimrey Smith | St. Andrews Middle School Cert # 390 |
| Roger Skillman | Anderson County Alternative School Cert # 391 |
| Randolph Brooks | Dreher High School Cert # 392 |
| Michael J. Kramer | Batesburg-Leesville School Cert # 393 |
| Heather E. Nix | Airport High School Cert # 394 |

The Above Teachers completed their Exam with respect to a SMED through the Center for Science Education or at the South Carolina Science Council Annual Meeting.

How to take the CMS Exam or the CAMS Exam

1. Locate a Proctor

(Someone to administer the CMS Exam near you)

The proctor can be a professor at your school, someone where you work, or other.

2. Establish in conjunction with your **proctor**

a place, date and time to have the exam administered.

Duration of test is 3 hours.

3. Send me the Name, mailing address and email address of the proctor.

4. The exam will be mailed to your proctor with an exam response sheet and a self-addressed envelope to mail the test back to me. (Both the exam and exam response sheet must be mailed back)

5. Please email me (Don Jordan) at djordan@sc.edu, if you have any questions.

ONLINE CMS & CAMS Exam {In progress}

We are working on an Online CMS & CAMS Exam. We hope to have the exams online by middle of April 2023.

USMA's Certified Metrication Specialist (CMS) Program (from USMA Web Page) (How to become qualified)

The **Certified Metrication Specialist (CMS)** program is the *only* bona-fide metric certification program available. It is a carefully monitored program under the direction of some of the nation's top metric-system experts who operate as the *USMA Certified Metrication Specialist Board*. The CMS program is designed to provide documentary evidence for individuals who can qualify as metrication specialists because of their education and experience in the use of the modern metric system which is known as SI (the International System of Units). The original certification expires in 3 years. To verify that holders of CMS certificates are keeping abreast of new developments in SI, arrangements have been made, by USMA, for re-certification of each individual. This re-certification takes place 3 years after award of the initial certificate and upgrades the rating to a *Lifetime* certification.\

Requirements for the Certified Metrication Specialist *Lifetime* Rating

The CMS program is structured to help maintain professional standards in the field of metrication. With US conversion to SI, companies, schools, government agencies, businesses, and other facilities will seek personnel who, in addition to their job skills, are knowledgeable about SI. Any person who is knowledgeable about SI units/symbols and the rules for using them is eligible for certification as a metrication specialist. However, each applicant must supply proof that he/she has been involved in metric activities where the knowledge of SI has been obtained and expanded. A CMS applicant does not have to be a member of the USMA to become a Certified Metrication Specialist, and being a member of the USMA does not automatically confer CMS status.

Categories of metrication specialist certification include:

- *Certified Metrication Specialist (CMS)*: Requires knowledge of the commonly used SI-metric units and symbols, plus the rules for using these everyday units and the ability to perform calculations with the everyday units.
- *Certified Advanced Metrication Specialist (CAMS)*: Requires knowledge of: (1) the commonly used SI units and symbols; (2) the SI technical units and symbols; and (3) SI usage rules. Also requires the ability to use SI in engineering/scientific/technical areas and calculations.

The **fee** for processing both CMS and CAMS applications to ensure applicants are qualified to take either of the examinations and for preparing and delivering the certificate and plaque is: \$100 for USMA members {\$25 without plaque}; and \$150 for non-members {\$50 without plaque}

To obtain details on the CMS program and **application/reference forms**, see the USMA Website at USMA.org, under About, then CMS Program.

If you have questions about the CMS program, contact the **CMS Board Chairman**.

Last updated: August 2019/February 2023

May want CMS Fee to be \$125 and \$50 with out plaque and CAMS \$175 and \$75 without plaque

Committees to Study the CMS and CAMS Exams
(Draft & Tentative, not all confirmed as of 02 15 23)

Committee No 1 CMS Exam

Mark Henschel, Central Director
Bryce Schubert, USMA Media expert
Don Jordan, USMA Eastern Director
Chris Stone, Clarknexsen, previous CMS Director
Don Hillger, President of USMA ex officio

More committee members needed, please volunteer.

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Committee No 2 CAMS Exam

Henry Knoepfle, Outreach coordinator
Howard Ressel, IEEE liaison
Varun Varada, USMA webmaster
Elizabeth Benham, USMA Technical Advisor
Chris Stone, Clarknexsen, previous CMS Director
Don Hillger, President of USMA ex officio

More committee members needed, please volunteer.

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Procedure to Study CMS and CAMS EXAMs

We will start by issuing the existing CMS and or CAMS Exam to the committee in word form for review. We would ask that the individual mark any changes needed on the actual exam in blue, red or green ink. Please email all corrections, deletions, and changes to me. I will input the changes myself and report back to the committee with the draft versions.

Our current CMS exam has 110 question we want to reduce to 100 questions. And Our current CAMS exam has 120 question we want to reduce to 100 questions. (Henry has worked on this and we will start with a version similar to his)

All question should have exactly five choices a, b, c, d, & e. If a question does not have a fifth choice, then suggest a possible fifth answer.

We will issue to the committee the existing CMS exam by Friday, February 17, 2023, and have corrections back to Don Jordan on or before Monday March 6, 2023.

Thanks don.

Discussion of Online Exams

Once we have a corrected version of the CMS & CAMS exams in word, we will try to decide on a suitable & save environment to administer the exams online. I use Formstack here at USC for our online contest in Math, Science, & Technology for grades 4 – 8.

Once our committee is established, we hope to select a subset (say 25 questions) that each committee member will be responsible to review.

That is the plan is for no individual to have to review all questions from an exam.