

Certified Metrication Specialist Program (CMS + CAMS + Lifetime)

USMA CMS Chair

DON JORDAN
don.jordan@usma.org

DON HILLGER
don.hillger@usma.org

USMA CMS Program (national)



1980 – Initiated by Board of Directors

- Certify and provide source of metric experts
- Provide proper SI/Metric expertise and training

Thank You! Many CMS Chairpersons through the years

History of certifying metric expertise



Through 2009

- 242 CMS/CAMS Awards
- 68 Lifetime Awards



Opportunity

- Committee chair vacancy
- Reactivate national program

South Carolina CMS Program (state)

Thank You! Don Jordan



Certified Metrication Specialist (CMS) Program



- The **Certified Metrication Specialist (CMS)** program is a metric certification program administered through USMA



- Designed to provide documentary evidence for individuals who can **qualify as metrication specialists** because of their education and experience in the use of the SI (the International System of Units) system



- The CMS program is structured to help **maintain professional standards** in the field of metrication



- Any person knowledgeable about **SI units/symbols and the rules for their use** is eligible for certification

Certified Metrication Specialist (CMS) Program



- Each applicant must supply objective proof that they have been **involved in metric activities and usage**



- CMS applicant **does not have to be USMA member** to become a Certified Metrication Specialist

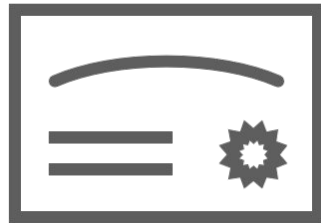
- Being a USMA member *does not* automatically confer CMS status



- Certification status is verified through **Exam** (closed book/reference examination)

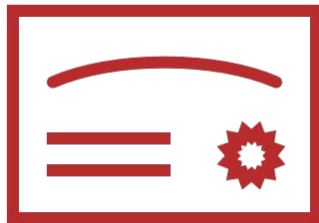
Certified Metrication Specialist (CMS) Program

Certification categories include:



1) ***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.



2) ***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.

Certified Metrication Specialist (CMS) Program

EXAMPLES OF TYPES OF QUESTIONS THAT WILL BE INCLUDED IN THE CMS EXAMINATION

I. Multiple choice questions with five-answer selections:

1. All of the following symbols are correctly written except _____
- | | | | | | | | |
|----|------------|----|----|---|---|---|------------------------------------|
| a. | millimetre | mm | | | | | |
| b. | centimetre | cm | | | | | |
| c. | ampere | A | 1. | a | b | c | <input checked="" type="radio"/> e |
| d. | watt | w | | | | | [NOTE: the correct answer is d] |
| e. | millilitre | mL | | | | | |
2. Among the following, the best price per unit is _____
- | | | | | | | | |
|----|---------------|----|---|------------------------------------|---|---|---------------------------------|
| a. | 500 g/\$1.25 | | | | | | |
| b. | 1 kg/\$2.35 | | | | | | |
| c. | 7.50 g/\$1.85 | 2. | a | <input checked="" type="radio"/> c | d | e | [NOTE: the correct answer is b] |
| d. | 1.5 kg/\$360 | | | | | | |
| e. | 900 g/\$2.30 | | | | | | |

EXAMPLES OF THE TYPES OF QUESTIONS THAT WILL BE INCLUDED IN THE CAMS EXAM

II. Multiple choice questions with five-answer selections.

1. Given: $1 \text{ lbf} = 4.4 \text{ N}$
 $1 \text{ in.} = 25.4 \text{ mm}$

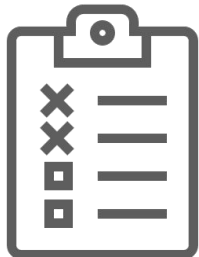
Convert 35 psi to the SI equivalent. The correct rounded answer is _____.

- | | | | | | | | |
|----|---------------------------------|----|---|---|---|---|------------------------------------|
| a. | $2.4 \times 10 \text{ kPa}$ | | | | | | |
| b. | 2.4 MPa | | | | | | |
| c. | 2.4 Pa | 1. | a | b | c | d | <input checked="" type="radio"/> e |
| d. | $2.4 \times 10^7 \text{ N/m}^2$ | | | | | | [NOTE: the correct answer is e] |
| e. | $2.4 \times 10^2 \text{ kPa}$ | | | | | | |

2. One of the following derived units is not expressed correctly.

- | | | | | | | | |
|----|-------|----|---|------------------------------------|---|---|---------------------------------|
| a. | Wh | | | | | | |
| b. | J/m/K | | | | | | |
| c. | m/s | 2. | a | <input checked="" type="radio"/> c | d | e | [NOTE: the correct answer is b] |
| d. | mm/s | | | | | | |
| e. | W•h | | | | | | |

Both CMS & CAMS Examinations:



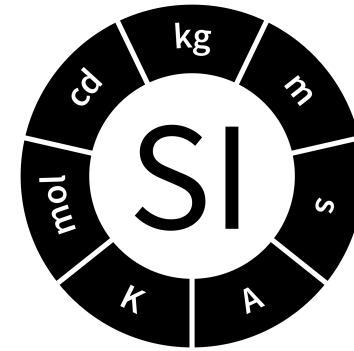
- 100 multiple choice questions
- Some require calculations
- Exam Duration - 3 hours allowed
- No reference materials allowed

CMS and CAMS Lifetime Program

Lifetime Rating Qualifications:

US Metric Association (USMA)

- Certified Metrication Specialist (CMS) or
- Certified Advanced Metrication Specialist (CAMS)



The Candidate must:



- 1) Currently hold a USMA CMS or CAMS certificate and plaque; and
- 2) Have held that USMA CMS or CAMS rating for **at least 3 years**

Certified Metrication Specialist (CMS) Lifetime Program

- Involved in metrication activities for the past **3 years**

Activities such as:



- 1) Working with SI metric units (in industry, as an educator, in government disciplines, in publications work, or similar occupations or activities)
- 2) Making metric system presentations
- 3) Taking or teaching SI metric courses
- 4) Attending metric meetings/conferences/workshops/seminars
- 5) Being a member of a metric organization since the original award of the CMS or CAMS rating
- 6) Holding an office in a metric organization
- 7) Organizing metric meetings/conferences or working on their committees
- 8) Preparing metric system exhibits
- 9) Authoring metric articles, books, texts, etc.
- 10) Writing letters promoting metrication to applicable officials (local, state, federal, etc.)
- 11) Supporting political candidates who favor US conversion to the metric system
- 12) Writing letters to urge publications to emphasize SI or to correct SI usage errors

- Submit a written request to be considered for Lifetime rating to **USMA CMS Board Chair**