

Biomedical Equipment Technician

Health Science Event

Eligible Divisions: Secondary & Postsecondary / Collegiate	Round 1: 50 Q test in 60 minutes	Digital Upload: NO
Solo Event: 1 competitor		



New for 2025 – 2026

This is a new event for 2025 - 2026.

10.27.25 The ACI AAMI Credentials Institute Certification Candidate Handbook link has been updated.

Event Summary

The Biomedical Equipment Technician event aims to inspire members to learn more about Biomedical Equipment Technicians (BMETs) who ensure the functionality and safety of medical, imaging, and dental devices, including patient monitors, dental handpieces, surgical robots, ventilators, vacuum pumps, and imaging systems. This competitive event consists of a written test with a tiebreaker essay question. Through this event, competitors will learn how BMETs troubleshoot, maintain equipment, and ensure compliance within healthcare safety standards. BMETs combine technical expertise in electronics and mechanics with problem-solving skills to ensure medical devices operate reliably. They also communicate effectively with healthcare staff to provide training and support, contributing directly to patient care quality.

Sponsorship

HOSA-Future Health Professionals appreciates the sponsorship of this event by [Advancing Safety in Health Technology \(AAMI\)](#), [College of Biomedical Equipment Technology](#), and [American Healthcare Apprenticeships](#). Through technical expertise, mentorship, and educational resources, AAMI aims to empower students to excel in this competition and explore HTM career pathways. Sponsorship reflects AAMI's mission to improve healthcare by advancing the safe and effective use of medical technology while addressing the growing demand for BMETs. [Advancing Safety in Health Technology \(AAMI\)](#), [College of Biomedical Equipment Technology](#), and [American Healthcare Apprenticeships](#) have developed a [special landing page](#) for HOSA competitors and advisors.



Dress Code

Proper business attire or official HOSA uniform. Bonus points will be awarded for [proper dress](#).

Competitors Must Provide:

- [Photo ID](#)
- Two #2 lead pencils (not mechanical) with eraser

HOSA Conference Staff will provide equipment and supplies as listed in [Appendix I](#)

General Rules

1. Competitors must be familiar with and adhere to the [General Rules and Regulations](#).

Official References

2. The two online courses below are used in the development of the test questions:
 - a. There is a single sign-up/login to access both courses: <https://hosa-cbet.talentlms.com/plus/>
 - i. **AAMI BMET 101** – AAMI Training
 - ii. **Medical Equipment Technician (MET) 100 Series HOSA** - College of Biomedical Equipment Training
 - b. Completing these courses will enable HOSA members to sit for the AAMI Certified Associate of Biomedical Technology (CABT) Certification at a reduced HOSA student rate.
 - c. Completion of these courses also provides a quality pre-apprenticeship pathway into the national registered Apprenticeship programs of both AAMI and American Healthcare Apprenticeship programs.
 - d. **Additional Optional Resources for both competitors and HOSA advisors:**
 - i. [ACI AAMI Credentials Institute Certification Candidate Handbook](#) - Provides information about AAMI HTM certifications
 - ii. [HTM in a Box](#) - Promoting the Healthcare Technology Management Field
 - e. All information about these resources and opportunities for HOSA members can be found on the [Landing Page](#).

Written Test

3. [Test Instructions](#): The written test will consist of 50 multiple-choice items in a maximum of 60 minutes.
4. One essay question will be administered with the original test.
5. **Time Remaining Announcements**: There will be NO verbal announcements for time remaining during ILC testing. All ILC testing will be completed in the Testing Center, and competitors are responsible for monitoring their own time.
6. **Test Plan**

The test plan for Biomedical Equipment Technician is:

 - A. Anatomy & Physiology - 10%
 - B. Medical Devices as Related to Public Safety - 22%
 - C. Safety in Healthcare - 16%
 - D. Fundamentals in Electricity and Electronics - 14%
 - E. Reasoning – 24%
 - F. Healthcare IT - 14%

7. Sample Test Questions

1. In medical terminology, what does the term “proximal” refer to? (MET 100)
 - A. Toward the front of the body
 - B. Toward the back of the body
 - C. Closer to the point of attachment**
 - D. Away from the point of attachment
2. What medical devices are defined as monitoring the electrical activity of the heart to detect abnormalities and rate? (MET 100)
 - A. ECG**
 - B. Blood pressure
 - C. Diopter
 - D. ETCO2
3. What is the primary purpose of biohazard and infection control procedures? (MET 100)
 - A. Enhance workplace aesthetics
 - B. Ensure patient confidentiality
 - C. The precautions of medical equipment

D. Maintain a safe working environment

8. Final Scoring

In the event of a tie, the essay will be judged to break the tie.

Future Opportunities:

Graduating from high school or completing your postsecondary/collegiate program does not mean your HOSA journey has to end. As a HOSA member, you are eligible to become a HOSA Lifetime Alumni Member - a free and valuable opportunity to remain connected, give back, and help to shape the future of the organization. Learn more and sign up at hosa.org/alumni.