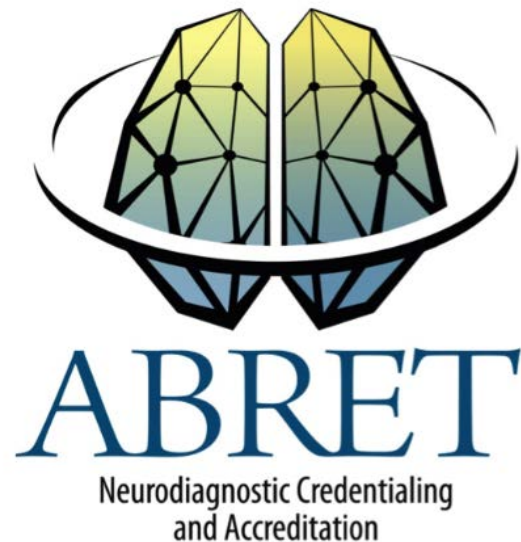


2027



**Handbook for Candidates
Certification for
Magnetoencephalography
Neuro Professionals
CMEG**

ABRET Executive Office

111 E. University Drive., #105–355, Denton, TX 76209

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The Certification Examination for Magnetoencephalography Neuro Professionals (CMEG) consists of 12 self-directed computer-based video modules, reading assignments, and quizzes administered by ASET – The Neurodiagnostic Society and culminating in a comprehensive proctored exam leading to the CMEG credential. The content of the modules and questions are composed by nationally recognized subject matter experts in MEG.

This handbook contains necessary information about the CMEG examination.

Please retain it for future reference.

Candidates are responsible for reading these instructions carefully.

This handbook is subject to change – Please refer to the [ABRET website](#) for the most up-to-date information.

Quick Reference Guide

This section pulls together the information candidates ask about most: how to apply, what happens right after you apply, and what happens after you take the exam. This guide is a summary — full details, including required policies, are in the sections that follow.

How to Apply

- Read this handbook, especially the Content Outline, which is the blueprint for the exam.
- Go to abret.org, click EXAMS, and select Pathways & Application under CMEG. Confirm you meet the requirements in the [Eligibility Chart](#) (R. EEG T. or R. EP T. credential, supervised experience, case documentation, CPR/BLS) and gather your [CMEG Documentation Form](#).
- **Complete the ASET MEG Course first** — buy it in the [ASET Online Store](#) and finish all 12 modules, readings, and quizzes before you apply (per the ABRET CMEG webpage, quizzes are open book, require 80%, and allow three attempts).
- Select the “Apply for CMEG” button on the [ABRET CMEG page](#), then log into (or create) your [ABRET Certemy account](#). Upload your ASET MEG Course completion certificate and eligibility documents, and pay the \$400 exam fee. **Ensure checks clearly identify your name as an exam candidate.**

What Happens After You Apply

- **Eligibility review** — ABRET reviews your eligibility, your ASET MEG Course completion certificate, and your application materials.
- **Scheduling Authorization** — Once your eligibility is verified, ABRET emails your Scheduling Authorization in approximately 2–5 business days. Double-check that your email address on file is correct.
- **Schedule right away** — Scheduling is handled through [Webassessor](http://webassessor.com/abret) (webassessor.com/abret). Onsite test-center appointments are first-come, first-served, so schedule as soon as you receive your Scheduling Authorization.
- **Two ways to test** — an onsite proctored exam, or live remote proctoring from a quiet, distraction-free location. Remote proctoring allows no breaks during the exam — if you may need a break, choose an onsite appointment.
- **Your 3-month testing window** — You have three (3) months (90 days) to sit for the exam after your eligibility is verified. There are no refunds, extensions, or transfers.
- **Rescheduling** — Free through webassessor.com/abret up to 72 hours before an onsite exam (24 hours for an online exam). Inside that window, a \$45 fee is paid directly to Kryterion.
- **Accommodations** — The [Testing Accommodation Request Form](#) must be emailed to tami@abret.org *before the final submission* of the candidate’s application.
- **If you are denied eligibility** — You may appeal in writing to ABRET within 30 days.

What to Expect After You Take the Exam

- **Right after testing** — You will see your score immediately after you submit the exam. The exam is a one-time event — you cannot re-enter it once submitted.
- **Official results** — If you pass, your CMEG certificate becomes available in the Digital Wallet of your Certemy account approximately 4 weeks after your exam date, and you will be listed on the ABRET website.
- **If you pass** — The CMEG credential is awarded for five years, and recertification requires 15 hours of documented MEG-related continuing education.
- **Questions** — You may comment on any exam question right after the exam, or submit a written complaint to the ABRET Executive Director within 14 calendar days.

Introduction

ABRET is a nonprofit credentialing board. ABRET supports the concept of voluntary certification by examination for health care professionals in clinical magnetoencephalography. Certification focuses specifically on the individual and is an indication of current knowledge in magnetoencephalography. ABRET does not guarantee the job performance of any individual.

KEY POINTS — what this section means for you

- ABRET sets and measures the knowledge required for CMEG certification through an objective, computer-based exam.
- Certification recognizes individual knowledge — it does not guarantee job performance.
- Continued professional growth is required through mandatory continuing education.

Objectives of ABRET

TO ESTABLISH STANDARDS FOR CERTIFICATION IN MAGNETOENCEPHALOGRAPHY TESTING BY:

1. Providing a standard of knowledge in magnetoencephalography required for certification.
2. Establishing and measuring the level of knowledge required for certification in clinical magnetoencephalography by means of an objective, computer-based written examination.
3. Formally recognizing those individuals who meet the eligibility requirements of ABRET and pass the Certification Examination for Magnetoencephalography Neuro Professionals.
4. Encouraging continued professional growth in magnetoencephalography through mandatory continuing education and recertification.

Non Discrimination Statement

ABRET – Neurodiagnostic Credentialing & Accreditation does not discriminate on the basis of age, gender, race, religion, national origin, marital status, or handicapped condition.

Administration

The Magnetoencephalography (MEG) Course is hosted by ASET – The Neurodiagnostic Society. The Certification in MEG Examination is developed and maintained by ABRET and administered through Kryterion's Webassessor, CMEG exam management and delivery portal (onsite and remote proctoring available).

Questions concerning the Certification Examination for Magnetoencephalography Neuro Professionals should be addressed to the ABRET Executive Office: 111 E. University Dr. #105-355, Denton, TX 76209 – (217) 726-7980 – www.abret.org. Questions concerning the MEG Course should be addressed to the ASET Executive Office at info@aset.org or (816) 931-1120.

Fees

Application Fee for the Certification Examination for Magnetoencephalography Neuro Professionals.....	\$400.00
Rescheduling Fee within 72 hours of onsite, test center exam and within 24 hours for online exams (but still within the 3-month/90-day testing period). Paid directly to Kryterion	\$45.00

Exam fees must be paid upon submission of the CMEG exam application.

THERE ARE NO REFUNDS nor TRANSFER OF FEES

2027 CMEG Eligibility Chart

CMEG Pathway: R. EEG T. or R. EP T. Credential

1. Minimum of 6 months *Supervised Experience*
2. *Documentation* of 25 evoked cases and 50 spontaneous cases encompassing three (3) or more modalities: AEF, LEF, MEF, SEF, VEF
3. *Completion of the [ASET MEG Course](#)*
4. Current CPR/BLS certification

Supervised Experience - A supervisor will be asked to verify required experience and may be contacted for verification.

Documentation - Use the [CMEG Documentation Form](#) available on the ABRET website. Documentation forms will be randomly audited. Incorrect or incomplete information may delay or negative eligibility.

ASET MEG Course – See The ASET MEG Online Course section for details.

Educational Activities for Recertification - Recertification will require 15 hours of documented continuing education. Educational activities may take the form of MEG-related:

- Lectures and workshops (up to 12 credits)
- Journal article reviews
- MEG record review (4 sessions with a physician equal 1 educational activity credit)
- Giving a lecture at departmental/lab meeting
- Authorship of journal article(s), case studies, or ASET NeuroCurrent article(s)
- Presenting poster and/or platform presentations at professional society meetings (3 credits)

The CMEG credential will be awarded to successful candidates for a five-year period. Recertification requires 15 hours of documented MEG-related continuing education. For more information, go to the [Recertification tab of the ABRET website](#).

The ASET MEG Online Course

This 12-lesson course offers an in-depth exploration of Magnetoencephalography (MEG) for neurodiagnostic professionals seeking to enhance their expertise. Designed for both beginners and seasoned practitioners. Visit the [ASET Online Store for more information](#).

The ASET MEG Online Course (continued)

Course Description: This 12-lesson course provides learners with a comprehensive understanding of magnetoencephalography (MEG) and its clinical applications. They will be able to trace the historical development of MEG, explain its role in neuroimaging, and apply best practices for efficient MEG lab management. Participants will gain knowledge about helium transfer safety, MEG/EEG recording fundamentals, and quality assurance protocols to ensure reliable data collection. Additionally, participants will learn about MEG source modeling techniques, including evoked field analysis and equivalent current dipole (ECD) modeling for epilepsy assessment. They will also explore language mapping applications and various MEG systems. Literature will be provided.

Quick Tips Before Proceeding with the Application Process

- *Your name must match exactly with the name shown on current government-issued photo ID, such as a driver's license or passport. Do not use nicknames or abbreviations. Temporary (paper) driver's licenses and social security cards are not accepted.
- *MEG Documentation forms are available on the ABRET website – www.abret.org
- *Have all required eligibility documents, including the ASET MEG Course completion certificate, ready to be uploaded into your ABRET Certemy Account. *PDFs are best.
- *Retain copies of all uploaded documents for your records. *Keep this HANDBOOK for reference.

NOTE: *No breaks are provided or allowed for online, remote proctored exams.*

Application Procedure

- 1) Read the Handbook for Candidates and follow instructions.
- 2) Go to the [ASET Online Store](#) to purchase and complete the MEG course modules, reading assignments, and quizzes.
- 3) Visit ABRET.org – click on Exams and select Pathways & Application under CMEG. See the [CMEG application page](#).
- 4) Scroll down the page and select the “Apply for CMEG” button.
- 5) [Log into your ABRET Certemy or Create a new ABRET Certemy account](#).
- 6) Complete the application by uploading the ASET MEG Course completion certificate and paying the \$400 exam fee.
 - Most major credit cards are accepted.
 - Ensure Checks identify your name as an exam candidate and the exam you are applying for. Mail checks to: ABRET Executive Office – 111 E. University Dr., #105-355, Denton, TX 76209
- 7) Upon verification of your eligibility requirements and application, you will receive a Scheduling Authorization from ABRET. See Scheduling Your Examination for more information.

A denial of eligibility for certification may be appealed in writing and sent to ABRET within 30 days. See RUL-21 of ABRET Examination Policies posted on the ABRET website [in the About Us page under Principles](#).

Quick Tips Following the Application Process

Candidates have three (3) months from the status of “Eligible to Test” date to sit for the examination.

After the 3-month period, candidates will need to reapply for the examination and pay a new application fee.

THERE ARE NO REFUNDS, EXTENSIONS, nor TRANSFER OF FEES

Scheduling Your Examination

Candidates cannot apply for the CMEG examination until they have completed the ASET MEG Course which consists of 12 Modules with Required Readings and successfully passed the quizzes.

Upon verification of your eligibility requirements and application, a Scheduling Authorization will be emailed to candidates in approximately 2–5 business days. Please ensure you enter your correct email address on the application. If you do not receive a Scheduling Authorization within two weeks of achieving “Eligible to Test” status, contact ABRET at (217) 726-7980 or email tami@abret.org for a duplicate.

It is the candidate’s responsibility to schedule the examination appointment through Webassessor at webassessor.com/abret. Select the “Schedule Now” button in your Webassessor account to proceed to scheduling.

The CMEG examination is administered in two ways:

- 1) as an onsite proctored exam or
- 2) via live remote proctoring in your home or another quiet, distraction free location. **NOTE: No breaks are provided or allowed for remote proctoring.** *If you believe you may need a break during the 3 hour exam, you must schedule an onsite proctored exam.*

For the live remote proctoring option, you must provide a computer with a camera, microphone, and an internet connection that allows real-time communication with a remote proctor. More information about Remote Proctoring can be found in your Webassessor account.

Appointment times for onsite test centers are first come, first serve, so schedule your examination appointment as soon as you receive your Scheduling Authorization in order to maximize the availability for your preferred location and preferred date.

After you make your test appointment, Webassessor will send you a confirmation email with the date, time, and location of your exam. Your **Exam Authorization Code** will also be contained in this email and **is required to launch your exam** for both onsite and online testing. Please check the confirmation carefully for the correct date, time, and location. [Use the Live Chat Bot feature in your Webassessor account for assistance](#) if you do not receive this email confirmation or if there is a mistake with your appointment.

Two (2) forms of identification must be presented in order to gain admission to sit for the exam. One must be a current government-issued photo ID (driver’s license or passport). Secondary ID must include your printed name, such as a credit card, bank debit card, or employee ID card. **Temporary, paper driver’s licenses are not accepted, nor are US Social Security cards.** It is recommended to have a printed copy of the email containing the **Exam Authorization Code** as well as Webassessor appointment confirmation.

Scheduling Your Examination (continued)

Arrival at the testing site at the appointed time is the responsibility of the candidate. Plan for weather, traffic, parking, and any security requirements specific to the testing location. Late arrival may prevent you from testing. *It is highly recommended the candidate becomes familiar with the testing site's location prior to appointment.

Changing Examination Appointment

Candidates may cancel or reschedule an exam through webassessor.com/abret with no additional fee up to 72 hours prior to your scheduled exam time. No Shows, Cancellations and Reschedules within 72 hours of your scheduled exam time will incur an additional fee of \$45.00 paid directly to Kryterion. Exam fees will not be refunded for sessions canceled without proper notice. Any penalty for not keeping an appointment will be the responsibility of the candidate.

Special Accommodation Requests

ABRET complies with the Americans with Disabilities Act (ADA) and will provide reasonable and appropriate accommodations in accordance with the ADA for individuals with documented disabilities who request and demonstrate the need for accommodation. ADA regulations define a person with a disability as someone with a physical or mental impairment that substantially limits one or more major life activities. ABRET requires documentation to validate the type and severity of a disability to enable accommodations to be specifically matched with the identified functional limitation in order to provide equal access to examination functions for all examinees. The information you provide and any documentation regarding your disability and test accommodation is confidential and is not included in scoring or reporting.

All approved testing accommodations must maintain the psychometric nature and security of the examination. Accommodations that fundamentally alter the nature or security of the exam will not be granted. Note that accommodation for an examination (test accommodation) may not be the same as accommodations provided by your employer for your job. You can find more information about testing accommodations under the Americans with Disabilities Act (www.ada.gov).

The [Test Accommodation Request Form](#) must be emailed to tami@abret.org *before the final submission* of the candidate's application. Missing information or incomplete Forms will result in a delay in processing.

To request test accommodations, complete the following steps:

1. Download the [Test Accommodation Request Form](#).
2. Complete Test Accommodations Form with your doctor/healthcare professional.
3. Email the Form and supporting documents to tami@abret.org *before the final submission* of the candidate's application. Missing information or incomplete Forms will result in a delay in processing.

If your Form is incomplete and/or not received at least 8 weeks before the start of the testing period, we cannot guarantee that we can make these test accommodations in time for you to test. Therefore, your application may need to be reprocessed for another testing period, and you would need to pay the reprocessing fee.

****Accommodation requests cannot be added to an existing exam appointment****

KEY POINTS — what this section means for you

- By applying, you agree to follow all ABRET policies, including the Code of Ethics and Disciplinary Policy.
- Keep ABRET informed of any change in your name, address, phone number, or email.
- Exam materials are confidential — you may not copy, share, or retain any exam content.
- ABRET may deny, suspend, or revoke certification for rule violations.

Application Agreement

- 1. Application.** I certify that all the information contained in my application is true and complete to the best of my knowledge. I hereby authorize ABRET and its officers, directors, employees, and agents (collectively, “ABRET”) to review my application and to determine my eligibility for certification.
- 2. Compliance with ABRET Rules.**
 - A. I have read and agree to abide by ABRET’s policies and procedures, including but not limited to those listed below. I will read and keep up to date with these rules.
 - i. Handbook for Candidates (including the Code of Ethics and Disciplinary Policy);
 - ii. Use of Credential and Trademark Policy; and
 - iii. ABRET Examination Policies.
 - B. I agree that ABRET may take action regarding my application, examination, or certification in accordance with its Disciplinary Policy, and that the penalties for violation of an ABRET rule include (but are not limited to) denial, revocation, or limitation of my certification.
 - C. As specified within the Disciplinary Policy, I agree to notify ABRET of any change in name, address, telephone number, or email address, and of any development bearing on certification such as (but not limited to) suspension, revocation, or expiration of a state license to practice, being sued by a patient, or being investigated or reprimanded by a state regulatory board.
- 3. Cooperation.** I agree to cooperate promptly and fully in any review of my application, examination(s), or certification, and I agree to submit any additional information requested.
- 4. Examination Confidentiality.** I am seeking admission to take the examination(s) for the purpose of pursuing certification, and for no other purpose. Because of the confidential nature of the examination(s), I agree to not make or keep copies, excerpts, or notes of examination materials, and to not use or divulge information learned from the examination(s). The examination(s) is/are the exclusive property of ABRET, and I will not use examination information in any way without the express prior written consent of ABRET.
- 5. Examination Administration.**
 - A. I agree to abide by ABRET’s reasonable rules regarding examination administration. ABRET may refuse my admission to an examination if I do not have the proper identification (valid photo ID and eligibility notice), or if administration has begun. The proctors may take steps as they believe necessary to maintain a secure and proper examination administration, including (but not limited to) relocating me before or during the examination.
 - B. If I am refused admission or fail to appear at the examination site, or if my examination performance is voided based upon my behavior, I agree that I will not receive a refund of the application or examination fees and there will be no credit for any future examination.
 - C. I understand that review of the adequacy of examination materials will be limited to computing accurate scoring; I hereby waive all further claims of examination review.

Application Agreement (continued)

D. I acknowledge that ABRET is concerned with reporting only valid scores. I agree that ABRET may cancel an examination score if there is adequate reason to question its validity because of misconduct or other circumstances.

E. A passing score is required for credentialing in all instances.

6. Continuing Compliance. I understand and agree that it is my responsibility to maintain and demonstrate continuous compliance with all ABRET policies and procedures.

7. Certification Marks.

A. The Magnetoencephalography credential and the stylized “CMEG” logo are the sole and exclusive property of ABRET and are subject to all applicable trademark and other rights of ABRET as owner under United States intellectual property law and international conventions. I agree to abide by ABRET’s instructions regarding use of its intellectual property, and to not use this intellectual property in any way without the express prior written consent of ABRET.

B. I agree to correct at my own expense any inaccurate or unauthorized use by me of ABRET’s credential and logo. I agree that if I refuse to make corrections, then ABRET is entitled to obtain all relief permitted by law, including but not limited to injunctive relief to enforce its rights with respect to the protection of its name, credential, logo, and other intellectual property.

8. Information Release. I agree that ABRET may release information regarding my application and certification record to state and federal authorities, licensing boards, employers, and others. This information includes (but is not limited to) ABRET’s findings regarding review of my application, fraudulent statements made by me, information indicating noncompliance with laws or regulations or with policies of other organizations, and the pendency or outcome of disciplinary proceedings.

9. Duration of Credential. This Application Agreement will become effective as of the date of acknowledgement upon submitting my application and will remain in effect for the duration of my application review. If I am granted certification, the terms of this Application Agreement will automatically continue in effect for the duration of my credential. I acknowledge and agree that initial credential is awarded only for a five (5) year period, and that completion of recertification requirements, recertification applications, and reviews will be required to maintain my credential.

10. Waiver of Claims & Indemnification.

A. I hereby waive all claims against ABRET arising out of my application and my participation in the certification program, including (but not limited to) claims arising out of (i) any release of information to state and federal authorities, licensing boards, employers, and others, and (ii) any investigation and review of my application and certification by ABRET. If ABRET is required by law to disclose confidential information, the individual(s) whose information is released will be notified to the extent permitted by law.

B. I agree to indemnify ABRET for any third-party claims arising out of any action taken pursuant to the policies and procedures of ABRET with regard to my application, the examination, or my certification. In addition, I agree to indemnify ABRET for any third-party claims arising out of my professional practice and related activities.

C. The provisions of this Waiver of Claims & Indemnification section do not extend to claims based on the gross negligence or willful misconduct of ABRET.

D. My obligations and rights and those of ABRET under this Waiver of Claims & Indemnification section will survive beyond the termination or expiration of my certification and remain in full force and effect.

Application Agreement (continued)

11. Governing Law & Venue. This Agreement is governed exclusively by the laws of the State of Texas, without reference to its choice of law doctrine. The parties agree that the sole jurisdiction and venue for any litigation arising from this Agreement is the appropriate federal court for the Eastern District of Texas or state court located in Denton County, Texas. If a dispute arises, the parties shall make a good faith attempt to resolve the dispute through dialogue and negotiation prior to pursuing court action.

Upon submitting the application for “CMEG” you will be asked to acknowledge that you have read and understand this Application Agreement and agree to its terms in consideration for the opportunity to seek certification from ABRET.

Information Release: If granted certification, you will be authorizing ABRET to release your name and the fact that you have been granted certification to newspapers and other publications, and to release your name, employment information, address, and email address in ABRET’s online directory and mailing list. You may opt out of this process by notifying the ABRET office in writing.

Examination Administration

The Certification Examination for MEG neuro professionals is administered on a daily basis, Monday through Sunday, excluding holidays, at computer-based testing facilities managed by Kryterion and through online proctoring. Candidates are expected to abide by the rules and regulations of the facility and its proctors.

In the event of inclement weather, contact Kryterion’s support team via the Live Chat Bot feature in your [Candidate Community Portal](#). For faster support, you will be asked to provide your Webassessor Login ID and exam details to the support staff.

Kryterion’s website provides information on what you can expect on your test day, including a walkthrough of check-in and security procedures: <https://www.kryterion.com/test-candidate/>.

Calculators: Candidates launch their exam from "My Assessments" in Webassessor. Once the exam begins, the calculator appears as a calculator icon in the exam toolbar (typically near the top of the exam window). Clicking the icon opens the calculator in a pop-up/floating window that can be moved around while answering questions.

NOTE: *No breaks are provided or allowed for remote proctoring. If you believe you may need a break during the 3.5 hour exam, you must schedule an onsite proctored exam.*

KEY POINTS — what this section means for you

- Bring a current driver’s license, passport, or US Military ID — temporary or paper IDs are not accepted.
- No electronic devices, papers, books, calculators, rulers, or reference materials are allowed in the testing room (an on-screen calculator is provided in the exam).
- You cannot leave the testing room during your exam; breaking a rule can mean forfeited fees, dismissal from testing, and canceled scores.

Rules for Examination

Please read the information below carefully.

You are responsible for adhering to the examination rules while testing.

Rules for Examination (continued)

1. You must present your current driver's license, passport, or US Military ID. Candidates without valid ID will NOT be permitted to test. Temporary or paper copies of your ID will not be accepted.
2. No Electronic devices that can be used to record, transmit, receive, or play back audio, photographic, text, or video content, including but not limited to, cell phones, laptop computers, tablets, Bluetooth devices; wearable technology (such as smart watches), MP3 players (such as iPods), pagers, cameras, and voice recorders are permitted.
3. No papers, books, calculators, rulers, or reference materials are permitted. *See note under the Examination Administration section regarding calculator availability.
4. No questions concerning examination content may be asked during the examination session. The candidate should read carefully the directions that are provided on screen at the beginning of the examination session.
5. Candidates are prohibited from leaving the testing room while their examination is in session.
6. Bulky clothing, such as sweatshirts (hoodies), jackets, coats, and hats (except hats worn for religious reasons), and most types of jewelry may not be worn while taking the examination. Proctors will ask you to remove such items.
7. Light clothing items removed for comfort such as sweaters, suit jackets, scarves, etc., must be hung on your chair, not placed in laps or on the workstation desktop.
8. All watches and Fitbit type devices cannot be worn during the examination.
9. No food/beverages are permitted during the examination.

Accessing cell phones and electronic devices at any time while you are taking the exam is prohibited.

VIOLETION OF ANY OF THE RULES LISTED ABOVE MAY RESULT IN FORFEITURE OF FEES, DISMISSAL FROM THE TESTING ROOM, AND CANCELLATION OF YOUR TEST SCORES.

*Hours and days of availability vary at different centers. Late arrival may prevent you from testing. Arrival at the testing site at the appointed time is the responsibility of the candidate. Plan for weather, traffic, parking, and any security requirements specific to the testing location.

Quick Tips Before Examination Day

- * You must bring/have your Exam Authorization Code to launch your exam at both onsite test centers and online proctored exams.
- *Hours and days of availability vary at different test sites.
- *It is highly recommended the candidate becomes familiar with the testing site prior to appointment.
- *The best preparation for the exam is to study the course content, reading materials, ACMEGS guidelines, and review quizzes. Be sure to study adequately *before scheduling the exam*.
- * This Handbook provides the Content Outline for the exam. Use it to help guide your study preparation.

KEY POINTS — what this section means for you

- Computer-based, multiple-choice exam based on the Content Outline.
- Weighting: Pre-Study Preparation 10%, MEG Instrumentation 40%, Performing the Study 30%, Post-Study Procedures 20%.

Content of the Examination

1. The Certification Program in Magnetoencephalography is a computer-based examination composed of multiple-choice, objective questions with a total testing time of two (2) hours/120 minutes.
2. The content for the final examination is described in the Content Outline.
3. The content of the modules and questions for the examination are obtained from individuals with expertise in MEG and are reviewed for construction, accuracy, and appropriateness by a separate group of subject matter experts.
4. The final Certification Examination in MEG will be weighted in approximately the following manner:
 - I. Pre-Study Preparation.....10%
 - II. MEG Instrumentation.....40%
 - III. Performing the Study.....30%
 - IV. Post-Study Procedures.....20%

KEY POINTS — what this section means for you

- This is the blueprint for what you'll be tested on — use it as your study guide.
- Four domains: Pre-Study Preparation, MEG Instrumentation and Principles, Performing the Study, and Post-Study Procedures.

Content Outline

- | | |
|---|--------------------------|
| I. Pre-Study Preparation | J. Impedance |
| A. Patient instructions/age-specific | K. Implanted devices |
| B. Relevant patient history/medications | L. Patient preparation |
| C. Allergies and sensitivities | M. Pre-test procedures |
| D. Neuroanatomy basics | 1. Digitizing head shape |
| E. Neurological disorders | 2. Fiducials |
| F. Medical contraindications to activation | 3. MEG coils |
| procedures | 4. EEG electrodes |
| G. Infection prevention | |
| H. Culture of safety (e.g., fall risks, restraints) | |
| I. Electrode application | |

Content Outline is Continued on the next page.

Content Outline (continued)

II. MEG Instrumentation and Principles

- A. Electricity and Magnetism principles
- B. Quality control
 - 1. Sensor tuning
 - 2. Phantom checks for dipole accuracy
 - 3. Empty room recording
 - 4. Stimulus delivery system quality control (e.g., an artificial ear measurements of auditory delays, optical sensor measurements of visual delays)
- C. MEG sensor
 - 1. Tuning
 - 2. Helium filling
 - 3. Helium recycler
- D. Safety and Instrumentation precautions
 - 1. Cryogenics
 - 2. Patient monitoring
 - 3. Seizures
 - 4. Stimulation
 - 5. Magnetic devices in the MSR

III. Performing the Study

- A. ACMEGS Guidelines

IV. Post-Study Procedures

- A. Analysis of data
 - 1. MEG Data processing
 - 2. MRI download and co-registration
 - 3. Montage design
 - 4. Filters
 - 5. Benign variants

- B. Computer knowledge related to devices and networks
- C. Troubleshooting techniques
- D. Artifact monitoring, identification, and mitigation
- E. Acquiring MEG data
- F. Evoked Potential studies
 - 1. Language Evoked Fields (LEF)
 - 2. Somatosensory Evoked Fields (SEF)
 - 3. Auditory Evoked Fields (AEF)
 - 4. Visual Evoked Fields (VEF)
 - 5. Motor Evoked Fields (MEF)
 - a. Tap
 - b. EMG
- G. Neurophysiologic correlates to clinical conditions
 - 1. Epilepsy
 - 2. Tumor
- H. Significant patient behaviors and clinical events (e.g., changes in level of consciousness, body movements, episodes)
 - 6. Artifacts
 - 1. Spike averaging
- B. Documentation (CPGs)
 - 1. Medical record
 - 2. Study Log
- C. Data managements and storage
- D. HIPAA
- E. Safety Data Sheets/OSHA Standards

References

The following references, or recent editions of the following, may be of use in preparing for the examination. The list does not attempt to include all acceptable material, nor is it suggested that the Certification Examination in Magnetoencephalography is necessarily based on these references.

Required Reading:

Guideline Documents from the American Clinical Magnetoencephalography Society at <http://www.acmegs.org/clinical-resources/practice-guidelines>.

Suggested Additional Reading:

Publications: Burgess, Richard C. "Meg Reporting" Journal of Clinical Neurophysiology. 37 (6): 545–53, 2020.

Mason K. M., Ebersole S. M., Fujiwara H., Lowe, J. P., Bowyer, S. M. (2013) What you need to know to become a MEG technologist. *Neurodiagn J.* 2013 Sep;53(3):191-206. PMID: 24046968.

*Available on the ASET - The Neurodiagnostic Society website (free for members) - or through this link: <https://www.ncbi.nlm.nih.gov/pubmed/24046968>

References (continued)

Books: Papanicolaou, A. C. (2009). *Clinical magnetoencephalography and magnetic source imaging*. New York, NY: Cambridge University Press.

Papanicolaou, A. C., Roberts, T.P.L., Wheless, J.W. (2020). *Fifty Years of Magnetoencephalography*. New York, NY: Oxford University Press.

*New and used available from Amazon.com

Scoring

The Board sets the passing standard for the exam. It is based on the number of correctly answered test questions the Board determines to represent minimal competency.

ABRET is concerned with reporting only valid scores. On rare occasions, misconduct or circumstances beyond the individual's control may render a score invalid. If doubts are raised about a score because of these or other circumstances, ABRET reserves the right to cancel any examination score if, in the sole opinion of ABRET, there is adequate reason to question its validity.

Report of Results

The candidate will see their score immediately after submission of the exam and will not be able to re-enter the exam. The exam is set for a one-time event.

Approximately 4 weeks following examination date, passing candidates will have access to their CMEG certificate in the Digital Wallet of their Credential Manager (i.e., Certemy account) and will be listed on the ABRET website.

Quick Tips After Achieving Your Credential

* It is important for ABRET to maintain your correct name and contact information. Please promptly notify the ABRET Executive Office of an address and/or name change by completing [ABRET's name and address change form](#). Although it is your responsibility to know when your credential expires, we will remind you via email through your [Certemy account](#) when your credential needs to be renewed.

Please make sure your Certemy account is up to date.

KEY POINTS — what this section means for you

- Comment on any question right after the exam, or file a written complaint within 14 calendar days.
- Exam materials are not available for candidate review.

Examination Challenges

Candidates may comment in the appropriate section at the end of the examination about any test question or questions, test procedure, and/or the test itself. Alternatively, a candidate may submit a complaint in writing to the ABRET Executive Director no later than fourteen (14) calendar days after taking the examination. All challenges and complaints will receive ABRET's full attention. Comments regarding examination validity will be reviewed by the ABRET examination committee. Examination materials shall not be available for review by candidates.

Confidentiality

1. ABRET will release the individual test scores ONLY to the individual candidate.
2. From time to time, it may be necessary for the ABRET Executive Office and Board of Directors to disclose candidate information and/or scores. No material or information disclosed will be released to any unauthorized person.
3. Any questions concerning test results should be referred to ABRET.
4. ABRET provides ASET – The Neurodiagnostic Society with the names, addresses, and emails of passing candidates. Candidates may opt out by contacting ABRET.

Attainment of Credential

Eligible candidates who pass the Certification Examination in Magnetoencephalography will be certified in MEG for a period of five years and will be permitted to use the CMEG designation after their names. They will be eligible for recertification after 5 years. If not recertified, they will no longer be permitted to use the CMEG designation.

KEY POINTS — what this section means for you

- The Code of Ethics and Grounds for Disciplinary Action define the conduct required to earn and keep an ABRET credential.
- Falling short of these standards can lead to suspension or revocation of your certification.

Purpose of Standards

ABRET has developed the *Code of Ethics* and the Grounds for Disciplinary Action to articulate standards of conduct required for eligibility of ABRET credentials, microcredentials, and continued credentialing of EEG, EP, CNIM, CLTM, CAP, CMEG, and NA-CLTM neuro professionals. Maintenance of board certification will require adherence to these and other ABRET rules. Individuals who fail to meet these requirements may have their certification suspended or revoked. ABRET does not guarantee the job performance of any individual.

KEY POINTS — what this section means for you

- Put patients first: dignity, confidentiality, safety, and freedom from discrimination.
- Stay current, practice competently and objectively, and don't take primary responsibility for interpreting EEG, EP, or IOM studies unless you're licensed or otherwise authorized to do so.
- Be honest and cooperative with ABRET, and follow all ABRET rules.

Code of Ethics & Standards of Practice

ABRET is a nonprofit credentialing board for Electroencephalographic (EEG) Technologists, Evoked Potential (EP) Technologists, Neurophysiologic Intraoperative Monitoring (CNIM) Technologists, Long Term Monitoring (CLTM) Technologists, Autonomic Professionals (CAP) and Magnetoencephalography (CMEG), NeuroAnalyst Long Term Monitoring (NA-CLTM) Technologists, and related microcredentials, and seeks to encourage, establish, and maintain the highest standards, traditions and principles of these technologies. ABRET Registered and Certified Neuro Professionals should recognize their responsibilities, not only to their patients, but also to society, to other healthcare professionals, and to themselves.

The following principles have been adopted by the Board of Directors in order to encourage personnel to aspire to the highest possible professional practice. An ABRET Registered Neuro Professional or Certified individual shall:

Code of Ethics & Standards (continued)

1. Do everything in his or her power to ensure that the current Guidelines of the American Clinical Neurophysiology Society are complied with in the department in which he or she works.
2. Preserve human dignity, respect patient's rights, and support the wellbeing of the patient under his or her care. The Registered or Certified neuro professional on shall avoid discrimination against individuals on the basis of race, creed, religion, sex, age, and national origin.
3. Appreciate the importance of thoroughness in the performance of duty, compassion with patients, and the significance of the task he or she performs.
4. Preserve the confidentiality of medical and personal information of a patient.
5. Strive to remain abreast of current technology and to study and apply scientific advances in his or her specialty. Carry out his or her professional work in a competent and objective manner.
6. Abide by laws related to the profession and to general public health and safety and avoid dishonest, unethical, or illegal practices.
7. Refuse primary responsibility for interpretation of testing or monitoring of Electroencephalograms, Evoked Potentials, or Neurophysiologic Intraoperative Monitoring for purposes of clinical diagnosis and treatment. Individuals who are licensed or otherwise authorized by practice standards to provide interpretation are excluded.
8. Be truthful, forthcoming, and cooperative in his or her dealings with ABRET.
9. Be in continuous compliance with ABRET's rules (as amended from time to time by ABRET).
10. Respect ABRET's intellectual property rights.
11. Upon suspension or withdrawal of certification, the certificant shall discontinue the use of all claims to certification that contain any reference to ABRET.

KEY POINTS — what this section means for you

- Certain criminal convictions can make you ineligible for certification.
- Discipline can result from fraud, cheating, misuse of ABRET credentials, or failing to report changes.
- Sanctions range from reprimand to denial, suspension, or revocation; you may appeal in writing within 30 days.

Violations Reporting Requirements

If conduct has occurred that may be grounds for disciplinary action under the Violations to Standards of Practice and Disciplinary Process policy, then ABRET may place an application on hold while reviewing the matter. These will be reviewed on a case-by-case basis.

A criminal conviction may be grounds to deny or otherwise limit eligibility. Convictions of this nature include (but are not limited to) felonies involving rape, sexual abuse of a patient or child, and actual or threatened use of a weapon or violence. If a conviction resulted in a sentence that includes incarceration, then the individual is ineligible while in confinement (RUL-26).

- 1. Grounds for Disciplinary Action.** ABRET may deny, suspend, revoke, or take other action regarding an application or certification if an individual is not in compliance with this Disciplinary Policy. Grounds for disciplinary action include (but are not limited to):
 - A. Ineligibility for certification, regardless of when the ineligibility is discovered;

Violations Reporting Requirements (continued)

- B. An irregular event in connection with an ABRET examination including (but not limited to) copying answers, copying examination materials, and causing a disruption in the testing area;
- C. Providing fraudulent or misleading information;
- D. Unauthorized possession or misuse of ABRET credentials, examinations, and other intellectual property;
- E. Misrepresentation of certification status;
- F. Failure to provide requested information in a timely manner;
- G. Failure to inform ABRET of changes or adverse actions;
- H. Gross negligence or willful misconduct in professional work;
- I. Accepting primary responsibility for interpretation of testing or monitoring for purposes of clinical diagnosis and treatment (Individuals who are licensed or otherwise authorized by practice standards to provide interpretation are excluded.);
- J. Failure to maintain a current professional credential as required by the jurisdiction in which the individual practices (this may include a license, certificate, or registration);
- K. The conviction of, plea of guilty to, or plea of no contest (“nolo contendere”) to a felony or misdemeanor related to public health and safety or the profession;
- L. Disciplinary action by a licensing board or professional organization other than ABRET; and
- M. Other failures to maintain continuous compliance with ABRET standards, policies, and procedures.

2. Sanctions.

A. ABRET may impose one or more of the following sanctions for a violation of this Disciplinary Policy:

- Denial or suspension of eligibility;
- Denial of certification;
- Revocation of certification;
- Non-renewal of certification;
- Suspension of certification;
- Reprimand;
- Probation;
- Notification of other legitimately interested parties;
- Or other corrective action (RUL-8).

Candidates or certificants may appeal the decision of the Ethics and Disciplinary Committee by submitting a written appeals statement within 30 days, according to ABRET’s policies.

Each candidate must affirm that the information provided in the Application is true and correct to the best of their knowledge. Each candidate further agrees to hold ABRET and its sponsoring organizations blameless from any claim for damages as a result of any action it may take in connection with this Application, the credentialing examination, or the results there of.