



NATIONAL BOARD OF ECHOCARDIOGRAPHY, INC.

CCEeXAM Exam Details

Format

The New Special Competence in Critical Care Echocardiography Exam (CCEeXAM) will be a 200-item computer-based exam. Questions will be multiple choice with video and still-images incorporated. Additional exam information can be found on the [FAQ](#) section of our website.

Tutorial

NBE offers a tutorial to familiarize yourself with how Prometric's computer-based tests operate. This tutorial will also be available at the beginning of the exam and you are given 15 minutes to navigate it. Go to <http://orientation.nbme.org/Launch/NBE> to view the tutorial.

Eligibility Requirements

Applicants for the CCEeXAM must hold a valid (unexpired) license to practice medicine (including training or temporary licenses) at the time of their application or must currently be in an ACGME accredited training program and in good standing. If you do not have a medical license, you must submit an **original**, notarized letter from the program director verifying this information. The letter must also be on appropriate letterhead and include the ACGME program number. PLEASE NOTE that if you are in an ACGME accredited training program and you DO have a valid license to practice medicine (a current training license) you DO NOT need to submit the letter from your program director. A copy of the valid license to practice medicine will suffice.

Eligibility Requirements for Non-North American Trained Physicians

Non-North American Trained Physicians applying for the CCEeXAM must supply the following: **Current License to Practice Medicine**. If your medical license does not have an expiration date, you are required to supply ONE of the following:

- An original letter from the Medical Council stating your license is permanent,

– OR –

- An original certificate of good standing, dated no more than 12 months prior to the date your online application is received via mail. All documentation must be supplied in English. If the original documentation is not in English, a certified translation must be attached to each document. The examinee will be responsible for all costs associated with a certified translation if needed. Please allow yourself appropriate time if needed to obtain your medical license from a third party or a translation is necessary. If any original documentation is required, it should be mailed to:
**The National Board of Echocardiography,
1500 Sunday Dr., Suite 102, Raleigh, NC 27607**

Certification

Once a physician passes an NBE exam, they are awarded Testamur status with the National Board of Echocardiography. There is no current information as to a certification process towards Diplomate status with the NBE in Critical Care Echocardiography as it is still in the developmental stage. A content outline can be found on the reverse of this page. For additional questions contact us at: info@echoboards.org or 1-833-270-1444.

Refund/Cancellation and Deferment Policy

Candidates who wish to cancel their application for the 2019 CCEeXAM application **MUST** notify NBE in **writing** via email at krussell@echoboards.org.

The refund/cancellation process is as follows:

Candidates registered during the **early registration period*** who wish to cancel/withdraw their application will receive a partial refund of \$795.00 (the initial fee of \$995.00 minus a \$200.00 processing fee). All **written** requests to cancel/withdraw **MUST** be received via email to krussell@echoboards.org **before** 12:00 PM (Noon) EST on Friday, September 7, 2018. Any early registration requests received after this deadline will not be processed and the late registration fee will apply.

- Please Note: Candidates that submit an application during the late registration period (**after** 12:00 PM (Noon) EST on Friday, September 7, 2018) are **NOT** subject to a refund. Withdrawal or cancellation will result in forfeiture of **ALL** exam fees. **Late Registration Deadline:** Friday, November 16th, 2018 @12:00 pm (Noon) Eastern Standard Time. **Late Registration Fee:** \$1,195.00 USD. ***No registration exceptions will be made beyond this deadline.**

– OR –

Candidates may defer, for any reason, their 2019 CCEeXAM application and fee paid to the 2020 examination registration, **as a one-time courtesy** (2020 ONLY), if requests and payments are received **before** 12:00 PM (Noon) EST on Friday, December 21, 2018 for an additional fee of \$200.00. Any requests received after this deadline, without medical documentation, will not be considered or processed.

The deferment process is as follows:

- A **written** request to defer **MUST** be received via email to krussell@echoboards.org **before** 12:00 PM (Noon) EST on Friday, December 21, 2018.
- The completed Deferment Request and Payment Form **MUST** be returned by email to krussell@echoboards.org **on or before** the deadline.
 - The administrative fee payment of \$200.00 is due at time the deferment is requested. Deferments will not be processed until payment is made.
 - If \$200.00 fee is not received before 12:00 PM (Noon) EST on Friday, December 21, 2018 the deferment will not be processed. Candidates will need to take the examination or forfeit **ALL** exam fees.

IMPORTANT – If an examination location and time has been scheduled with Prometric, it is the applicant's responsibility to cancel the appointment at www.prometric.com. Upon cancelling the appointment with Prometric the candidate **MUST** provide NBE with a copy of the cancellation confirmation that Prometric will email you. Requesting to cancel or withdraw with NBE **DOES NOT** cancel your examination appointment with Prometric.

(continued on reverse)

Partnering Organizations

- National Board of Echocardiography
- Society of Cardiovascular Anesthesiologists
- American Society of Echocardiography
- Society of Critical Care Medicine
- American College of Chest Physicians
- American College of Emergency Physicians
- American Thoracic Society
- World Interactive Network Focused on Critical Ultrasound
- American Society of Anesthesiologists

About NBE

The National Board of Echocardiography, Inc. (NBE) is a not-for-profit corporation established in 1996 to:

- Develop and administer examinations in the field of Clinical Echocardiography,
- Recognize those physicians who successfully complete either
 - the Examination of Special Competence in Adult Echocardiography (ASCeXAM),
 - the Recertification Examination of Special Competence in Adult Echocardiography (ReASCE),
 - the Examination of Special Competence in Advanced Perioperative Transesophageal Echocardiography (PTEeXAM),
 - the Recertification Examination of Special Competence in Perioperative Transesophageal Echocardiography (RePTE)
 - the Examination of Special Competence in Basic Perioperative Transesophageal Echocardiography (Basic PTE)
- Develop a certification process that will publicly recognize those physicians who have completed an approved training program in echocardiography as specified in this application and have additionally passed an examination of special competence in echocardiography administered by the NBE.

For more information or to apply for an examination, visit us online at www.echoboard.org

Contact NBE Headquarters by phone: 1-833-270-1444 or email: info@echoboard.org

Content Outline – Critical Care Echocardiography Exam (CCE)

(For a complete listing of content overview, please visit our website at www.echoboard.org)

1. **Functional Anatomy**
 - A. **Left ventricle**
 1. Systolic function (qualitative, quantitative)
 2. Diastolic function
 3. LV chamber quantification
 4. Masses/thrombi
 5. Cardiomyopathies
 - B. **Right ventricle**
 1. RV chamber quantification
 2. Function
 3. Estimated right heart pressure
 - C. **Atria**
 1. Chamber quantification
 2. Atrial septum
 3. Masses/thrombi
 4. Left atrial hemodynamics
 - D. **Valvular disease**
 1. Aortic
 2. Mitral
 3. Tricuspid
 4. Pulmonic
 5. Endocarditis
 6. Prosthetic valve disease/dysfunction
 - E. **Pericardium**
 1. Pericardial effusion
 2. Constrictive pericarditis
 3. Hematoma
 - F. **Great vessels**
 1. Aorta
 2. Pulmonary artery
 3. IVC and SVC
 - G. **Devices and foreign bodies**
 1. Catheters
 2. Pacing wires
 3. Cannulae
 - H. **Intracardiac masses**
 1. Left ventricle
 2. Right Ventricle
 3. Atria
 - I. **Adult congenital**
 1. Atrial septal defect
 2. Ventricular septal defect
 3. Bicuspid valve
 4. Patent foramen ovale
 5. Persistent left superior vena cava
2. **Clinical Diagnosis and Management**
 - A. **Shock**
 1. Obstructive
 2. Hypovolemic
 3. Distributive
 4. Cardiogenic
 - B. **Volume assessment**
 1. Fluid responsiveness
 2. Volume overload
3. **Technical Skills & Equipment Optimization**
 - A. **Physics**
 1. 2D ultrasonography
 2. Doppler ultrasonography
 3. M mode
 4. Enhanced cardiac ultrasound (contrast)
 - B. **Artifacts**
 1. Reverberations
 2. Side lobe
 3. Mirror image/refraction
 4. Acoustic shadowing
 5. Aliasing
 6. Electrical interference
 - C. **Image acquisition**
 1. Probe position
 2. Probe manipulation
 3. Probe selection
 4. Indications
 5. Canonical views
 6. Image optimization
 7. Normal variants
 8. Patient positioning
 9. Cardiac versus abdominal presets
4. **Integrated Ultrasound Imaging**
 - A. **Lung and pleural**
 1. Postintubation assessment
 2. A line versus B line
 3. Pleural effusion
 4. ARDS
 5. Pneumonia with sepsis
 6. Pneumothorax
 - B. **Vascular**
 1. DVT
 - C. **Abdominal**
 1. Evaluation for free fluid
5. **Acute cardiovascular presentations**
 1. Myocardial infarction
 2. Regional wall motion abnormalities
 3. Pulmonary embolism
 4. Aortic dissection
 5. Valvular heart disease
 6. Cardiomyopathy
 7. Congenital heart disease
6. **Trauma**
 1. Blunt
 2. Penetrating
7. **Respiratory failure**
 1. Cardiac versus pulmonary
 2. Adverse effects of mechanical ventilation
8. **Cardiac arrest**
 1. Etiology
 2. Classification
 3. Appropriate implementation