

INTERNATIONAL QEEG CERTIFICATION BOARD (IQCB)

QEEG TECHNOLOGIST BLUEPRINT OF KNOWLEDGE

AUGUST 2026

(A Study Guide will also be available)

Areas of competency required for Technologist certification in Quantitative Electroencephalography and Electrophysiology:

I. HISTORY - 1 HOUR

Basic knowledge of the history of quantitative electrophysiology.

II. NEUROSCIENCE - 2 HOURS

The following areas will be covered in the formal examination, and it is recommended that the candidate review readings that encompass the following:

- a. Behavioral correlates to brain anatomy and networks

III. TECHNICAL - 6 HOURS

- a. Gain competence in patient management, instrumentation, safety, and data acquisition principles relevant to EEG and EP recordings.
- b. The competent clinical neurophysiologist must acquire knowledge of electronics and instrumentation related to EEG and EPs.
- c. Topographical representation of EEG
- d. Electrodes types and acquisition systems (including electrode impedance management)
- e. Instrumentation (Acquisition and review parameters/settings)
- f. Montages and reference systems
- g. Electrical/clinical safety Knowing Ohms Law is critical
- h. Infection prevention and control
- i. Behavioral observations during recordings
- j. Etiology of artifacts and troubleshooting

IV. EEG - 4 HOURS

- a. Fundamentals of functional neuroanatomy, including network theories, neurochemistry,

neuropharmacology and neuropathology

- b. Basic knowledge of neurophysiology of EEG
- c. Editing and identifying artifacts
- d. Normal waveform patterns
- e. Standards of EEG acquisition procedures including activation
- f. Abnormal EEG waveforms and rhythms. Visual examination of EEG traces to identify time and location of artifact and pathology and annotate abnormalities in placement due to skull abnormalities/injury
- g. The use of different EEG montages for wave form analysis
- h. Demonstrate competencies in collection and management of eeg data

V. QEEG - 3 HOURS

- a. Understanding importance of the quality of the recording and the impact on qEEG metrics
- b. Understanding the uniqueness of qEEG analysis from other neuro imaging techniques and conventional metrics derived from the EEG signal

VI. PSYCHOPHARMACOLOGY - 1 HOUR

- a. Potential effects of prescribed and non-prescribed drugs on clinical presentation
- b. Potential effects of prescribed and non-prescribed drugs on EEG measure
- c. Potential effects of different drugs on learning tasks.

VII. ETHICS - 1 HOUR

- a. Responsibilities and liabilities in data collection
- b. Aware of patients rights and safety