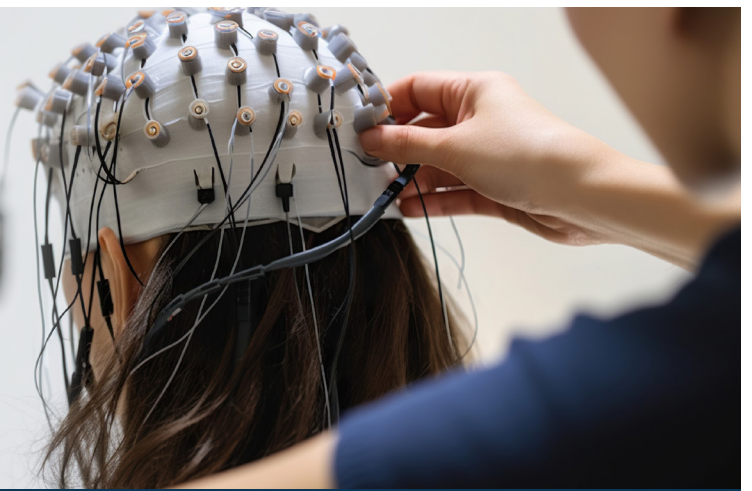


# BFSA EEG/QEEG COURSE 2024

FOR NEUROFEEDBACK THERAPISTS

27 HOURS LECTURES + SELF-STUDY



Outline of basic EEG course to facilitate the understanding of Neurofeedback and ultimately QEEG.

This course is intended primarily for individuals training / practicing Neurofeedback or QEEG Assessment. Registration with an appropriate licensing Board, in a Health Professional Specialty (which enables practitioners to add NFB and QEEG as additional modalities to their practice), is a requirement. It is also open to other registered categories e.g. Psychologists, O.T,s etc. who may be interested in a basic, hands-on course.

Training in NFB and QEEG DOES NOT enable individuals to make a neurological diagnosis. This is the domain of Neurologists.

The main purpose of this course is to provide entry-level knowledge and practical competency in the domains of EEG acquisition, NFB and QEEG, addressing the overlap and differences between these disciplines, and providing a strong foundation for future specialized training of registered practitioners in these disciplines.

This course is NOT a NFB or QEEG qualification course, but it is viewed as preparatory training for the 36-hour BCIA and IQEEG Bootcamp courses. The latter still needs to be completed through accredited trainers to certify with the respective boards.

The only purpose of the course is to enhance knowledge, enabling clinicians to become better practitioners.

THURS, 29 FEB 2024

**MODULE 1**  
(2 HOURS)

| TIME                  | Introduction  |
|-----------------------|---|
| SAST<br>19:00 - 21:00 | <ul style="list-style-type: none"><li>• Overview of the course (outline of the course)</li><li>• Statement of intent.</li><li>• Video introducing how EEG is used as a measurement and reflection of internal physiological states and a discussion on how this signal is used in the field of Neurofeedback.</li><li>• Introduction to 10/20 Placement + Video</li><li>• Reading Suggestions</li></ul> |



SAT, 2 MARCH 2024

**MODULE 2**

(7 HOURS - IN PERSON/ONLINE) SAST 9 AM - 4 PM

*This is a practical and didactic session in the effective use of equipment. It includes an introduction to equipment, preparation of the client and hygiene. Practical 10/20 placement demonstration with commentary on what is being done, technical set-up, safe equipment usage, and important terminology will be presented. YouTube clips, notes and PowerPoint for self-study and later reference. Interactive session with questions and discussion are welcome.*

| TIME          | TOPIC   |
|---------------|---|
| 09:00 - 10:15 | <b>Session 1: Some Basic Terminology</b>  |
| 10:15 - 10:30 |  TEA BREAK             |
| 10:30 - 12:00 | <b>Session 2: Introduction to EEG</b>   |
| 12:00 - 12:45 |  LUNCH                 |
| 12:45 - 14:00 | <b>Session 3: Practical Measurement Demo</b>  |
| 14:00 - 16:00 | <b>Session 4: Participants Practice Measurement</b>   |
|               |  TEA BREAK AS REQUIRED |

TUESDAY, 19 MARCH 2024

**MODULE 3**

(2 HOURS)

| TIME                  | TOPIC  |
|-----------------------|--|
| SAST<br>19:00 - 21:00 | <p>The aim of this section is to understand how the EEG is generated. An overview of the Autonomic Nervous System (ANS), Central Nervous System (CNS) and various parts of the brain will be explored as a path to understanding the underpinning of the EEG signal. The electrophysiology of neurons will also be presented.</p> <ul style="list-style-type: none"><li>• <b>How is EEG Generated?</b></li></ul> |

THURSDAY, 18 APRIL 2024

**MODULE 4**

(2 HOURS)

| TIME                  | TOPIC  |
|-----------------------|--|
| SAST<br>19:00 - 21:00 | <p>This module aims at introducing brainwaves from delta to gamma, frequency bands and the generation of EEG. Actual EEG's will be used to demonstrate the various brainwaves.</p> <ul style="list-style-type: none"><li>• <b>Brain waves and frequency bands - an introduction.</b></li></ul> |

THURSDAY, 16 MAY 2024

**MODULE 5**

(2 HOURS)

| TIME                  | TOPIC  |
|-----------------------|--|
| SAST<br>19:00 - 21:00 | <p>Different montages, their strengths and weaknesses will be presented.</p> <ul style="list-style-type: none"><li>• <b>Introduction to Montages</b></li></ul> |






SATURDAY, 18 MAY 2024

**MODULE 6:**

(7 HOURS - IN PERSON/ONLINE) SAST 9 AM - 4 PM

Practical and informative day with the ultimate aim of understanding basic QEEG metrics: FFT power distribution, Z-score summaries, 1hz bins and PAF etc.

| TIME          | TOPIC   |
|---------------|---|
| 09:00 - 10:00 | <b>Session 1:</b> Demo of EEG Acquisition, show artefacts after set up, send through to QEEG-Pro for Processing |
| 10:00 - 10:15 | <b>Session 2:</b> Artefacts   |
| 10:15 - 10:30 |  TEA BREAK                     |
| 10:30 - 11:30 | <b>Session 2 cont:</b> Artefacts continued  |
| 11:30 - 12:45 | <b>Session 3:</b> Normal Variants (50 mins) and Phenotypes (50 minutes)   |
| 12:45 - 13:30 |  LUNCH                         |
| 13:45 - 16:00 | <b>Session 4:</b> Practical Demo - Putting it all together - downloading info from QEEGPro to obtaining maps.   |
|               |  TEA BREAK AS REQUIRED         |

TUESDAY, 11 JUNE 2024

**MODULE 7**

(2 HOURS)

| TIME                  | TOPIC   |
|-----------------------|---|
| SAST<br>19:00 - 21:00 | Overview and reporting structure. Revision of brainwaves and frequency bands and their relation to brain states, origin and generators of different brainwaves, expected location and morphology.<br><br>• <b>Putting it all together (2)</b> |

SATURDAY, 20 JULY 2024

**MODULE 8**

(3 HOURS)

| TIME                  | TOPIC  |
|-----------------------|--|
| SAST<br>13:00 - 16:00 | Touching on additional information.<br><br>• <b>Session 1 - Abnormal EEG's</b><br>• <b>Session 2 - Medication and the EEG</b><br>• <b>Session 3 - Ethics</b> |

SATURDAY, 17 AUG 2024

**MODULE 9**

(4 HOURS)

| TIME          | TOPIC   |
|---------------|---|
| 13:00 - 17:00 | <i>To be confirmed.</i><br><br>• <b>Session 1 - Round table discussion QEEG Reports - Recommendations for training</b><br>• <b>Session 2 - Participants demonstration measurement, putting on electrodes, getting a good impedance.</b> |



## NEUROPHYSIOLOGIST CLINICAL REVIEW SESSIONS OF THE RAW EEG:

**Enrollment for clinical review sessions of the Raw EEG is advised as an add-on to enhance learning process.** More information will be available on this opportunity soon.



**NEUROPHYSIOLOGIST:** Ms Irene Masters



**EMAIL:** [ijohn@mweb.co.za](mailto:ijohn@mweb.co.za)



**TIME:** Monday 19.00-20.00



**COST:** On Application

- Learn to look at and 'get your eye in' with distinguishing artefact from EEG tracings (5 sessions)
- Different Montages, the normal EEG, Introduction to abnormal EEG tracings (5 sessions)
- Various frequency bands and recognizing brainwave categories (5 sessions)
- Can be ongoing if requested.

## RECOMMENDED BOOKS/ARTICLES ETC:

1. Bester, H. Neurofeedback: The Non Invasive Alternative
2. John Demos: Understanding Neurofeedback - Book 1
3. Rowan's Primer of EEG
4. Libenson, M. Practical Approach to EEG.
5. Collura, T: Technical Foundations of Neurofeedback
6. Hammond's List of Terminology
7. Various Articles and PowerPoint Presentations to facilitate learning
8. Hammond, C. Lubar, J et al. QEEG Position Paper
9. Gunkelman, J. EEG Phenotypes
10. Collura, C. When worlds collide
12. YouTube Videos - Measurement of 10-20 placements

**More information on this section will be available to people who register.**

