

SURGICAL NEUROPHYSIOLOGY (MS)

The Master of Science in Surgical Neurophysiology is a one-year professional master's program designed to provide students with the knowledge and clinical training required to become a board-certified Surgical Neurophysiologist. Courses in neuroanatomy, neurophysiology, neural signal acquisition, and the application of neurophysiological measurements in the surgical environment are covered in a year-long program of study, beginning in the summer. A total of 32 credits are required. In addition, students complete a clinical practicum. After completion of the program and participation in 100 surgical cases (during or after their clinical practicum), students will be eligible to participate in the national exam for Certification in Neurophysiologic Intraoperative Monitoring (CNIM Certification) conducted by the American Board of Registration of Electroencephalographic and Evoked Potential Technologists (ABRET).

Program Requirements

Course	Title	Credits
Required Courses		
PNB 5101	Anatomy and Physiology for Intraoperative Neuromonitoring	4
PNB 5102	Fundamentals of Intraoperative Neuromonitoring	3
PNB 5103	Applied Intraoperative Neuromonitoring	2
PNB 5106	Advanced Modalities in Intraoperative Neuromonitoring	4
PNB 5104	Clinical Practicum in Intraoperative Neuromonitoring	3-9
PNB 5105	Seminar in Intraoperative Neuromonitoring	4
Electives		
Select the remaining required credits from the following: ¹		6-12
PNB 3251	Biology of the Brain	
PNB 3275	Biology of Synaptic Transmission	
PNB 4400	Biology of Nervous System Diseases	
Any PNB Graduate level courses		
NURS 3100	Clinical Science I	
NURS 3110	Clinical Science II	
NURS 3120	Patient Centered Health Assessment Across the Lifespan	
PSYC 5228	Neuropsychopharmacology	
SLHS 5322	Electrophysiology Techniques and Interpretation I	
SLHS 5375	Auditory System: Anatomy and Physiology	
Total Credits		26-38

¹ No more than six credits from courses at the 3000-4000 level. A minimum of 26 credits needs to be from PNB courses including the Required Courses.

Students must also complete a clinical practicum that includes a minimum of 250 clinical contact hours in mentored surgical cases.