

NEURODIAGNOSTIC TECHNOLOGY, ASSOCIATE IN SCIENCE DEGREE

Banner Code: 1_AS_NDT
Financial Aid Eligible

Neurodiagnostic Technology is an allied health specialty for diagnosing patients with neurological disorders such as epilepsy, stroke, coma, multiple sclerosis, and many others. A competent Neurodiagnostic Technologist has knowledge of the nervous system and knows how to properly operate many types of sophisticated instruments. Neurodiagnostic Technologists are employed in hospitals, clinics, physicians' offices, university medical centers and research centers.

Orange Coast College's Neurodiagnostic Technologist program provides theory and clinical experience in Electroencephalography (EEG) and in Evoked Potential (BAEP, PVEP, SSEP) testing as well as an introduction to other neurological testing procedures. Some of the testing procedures include Nerve Conduction Studies (NCS), Long-term Monitoring (LTM) for Epilepsy, Intraoperative Neurophysiological Monitoring (IONM), Transcranial Doppler (TCD) Studies, and more.

The Commission on Accreditation of Allied Health Education Programs (CAAHEP) has accredited this NDT Program. The program meets the eligibility requirements to take the EEG and EP exams of the American Board of Registration in Electroencephalographic and Evoked Potential Technologists (ABRET).

The program can be completed in approximately 22 months (4 semesters and 1 summer). Completion of the program earns an Associate in Science Degree in Neurodiagnostic Technology. A new group of students begins this program in the fall semester of even years.

Program Admission

1. Allied Health 010 course – application and orientation
2. The student must complete Associate in Science degree General Education requirements and the program prerequisites prior to acceptance into the program.

Program Outcome

The goal of the program is to meet the needs of the local health care community by preparing students for entry level employment as a professional and competent Neurodiagnostic technologist.

Review Graduation Requirements (<https://catalog.cccd.edu/orange-coast/graduation-requirements/associate-degree/>) and General Education (<https://catalog.cccd.edu/orange-coast/general-education-patterns/>).

Course	Title	Units
<i>Recommended Preparation</i>		
LIBR A100	Library Research and Information Competency	
<i>Program Prerequisites</i>		
ALH A010	Health Occupations	0.5
ALH A111	Medical Terminology	3

Course	Title	Units
BIOL A221	Anatomy-Physiology	4
<i>Required Courses</i>		
ALH A115	Patient Care	2
ALH A120	Human Diseases	2
ALH A130	Applied Pharmacology	3
NDT A110	Basic Electroencephalography	5
NDT A115	Advanced Electroencephalography	4
NDT A116	Clinical Experience 1	5.5
NDT A117	Clinical Experience 2	4.5
NDT A190	Introduction to Neuro Anatomy and Physiology	3
NDT A191	EEG Record Review-Normal	1
NDT A200	Neurodiagnostic Lab Practice	1
NDT A279	Pediatric Electroencephalography	2
NDT A280	Neurologic Disorders	3
NDT A282	NDT ABRET Registry Exam Prep	1
NDT A284	Introduction to Transcranial Doppler	1
NDT A285	Introduction to Nerve Conduction Velocity	1
NDT A286	Clinical Experience 3	4.5
NDT A287	EEG Record Review-Abnormal	1
NDT A288	Evoked Potentials	4
NDT A289	Clinical Experience 4	3.5
NDT A296	Introduction to Intraoperative Monitoring	1.5
NDT A297	Microcomputer Applications in Neurodiagnostics	1.5
NDT A298	Clinical Internship	2
PSG A100	Polysomnography Basics	1
Total Units		65.5
<i>Requirement</i>		
Requirement		Units
Program Major Units		65.5
AS General Education Option 1, 2, or 3		Varies
Total Minimum Degree Units		80.5

Neurodiagnostic Technology Suggested Electives

CMST A100 Interpersonal Communication
ELEC A140 Technical Electronics
CDE A180 Child, Growth and Development
PHIL A120 Ethics
PHYS A110 Conceptual Physics
PSYC A160 Statistics for the Behavioral Sciences
SPAN A180 Elementary Spanish 1

Polysomnography Cross-Training Option

This option is recommended for Neurodiagnostic Technology graduates who would like to cross-train as Polysomnographic Technologists. Upon completing the cross-training courses, students will earn an additional AS in Polysomnography.

Program Option Prerequisite

Neurodiagnostic Technology, Associate in Science Degree

Course	Title	Units
Required Courses		
PSG A140	Introduction to Polysomnography	4
PSG A150	Intermediate Polysomnography	3
PSG A155	Cardiac Rhythm Analysis	0.5
PSG A160	Polysomnography Testing	2
PSG A165	Polysomnography Clinical 1	1
PSG A170	Polysomnographic Practice	0.5
PSG A175	Polysomnography Clinical 2	3
PSG A190	Introduction to Polysomnography Anatomy and Physiology	3
PSG A250	Polysomnography Record Review	3
PSG A260	Advanced Polysomnography	3
PSG A265	Polysomnography Clinical 3	3
PSG A280	Pediatric Sleep Medicine	2
PSG A285	Polysomnography Internship	2.5
PSYC A130	Life Span Developmental Psychology	3
RSPC A185	Respiratory Anatomy and Physiology	3
RSPC A265	Pulmonary Pathology	3
Total Units		39.5
Requirement		
Total Units		122.5

Program Sequence

These sequences at Orange Coast College are general course curriculum maps for students to finish all major and general education requirements for two-year completion of degrees, and/or fulfillment of transfer requirements. The course sequence may include course prerequisites and other placement requirements. **Students are advised to meet with an Orange Coast College Counselor to review course selections and sequences to ensure that completion of this program will meet a student's transfer and career goals.**

For terms less than 15 units, students should meet with a counselor to reconfigure their sequence to maintain financial aid eligibility with a full-time course load.

Course	Title	Units
Year 1		
Semester 1		
LIBR A100	Library Research and Information Competency	3
ALH A010	Health Occupations	0.5
BIOL A221	Anatomy-Physiology	4
OCC AS GE AREA C1- CHOOSE ONE		3
OCC AS GE AREA D- CHOOSE ONE		3
Units		13.5
Semester 2		
ALH A111	Medical Terminology	3
Select one of the following or satisfy Math competency (completion of High School Algebra 2 with a "C" or better): ¹		0-4
MATH A030 or MATH A045	Intermediate Algebra or Combined Elementary and Intermediate Algebra	

Course	Title	Units
OCC AS GE AREA A1- CHOOSE ONE		3
OCC AS GE AREA A2- CHOOSE ONE ²		3-4
OCC AS GE AREA C2- CHOOSE ONE		3
Units		12-17
Year 2		
Semester 1		
ALH A115	Patient Care	2
ALH A120	Human Diseases	2
ALH A130	Applied Pharmacology	3
NDT A110	Basic Electroencephalography	5
Units		12
Semester 2		
NDT A200	Neurodiagnostic Lab Practice	1
NDT A115	Advanced Electroencephalography	4
NDT A116	Clinical Experience 1	5.5
NDT A190	Introduction to Neuro Anatomy and Physiology	3
NDT A191	EEG Record Review-Normal	1
NDT A287	EEG Record Review-Abnormal	1
Units		15.5
Summer		
NDT A117	Clinical Experience 2	4.5
Units		4.5
Year 3		
Semester 1		
NDT A280	Neurologic Disorders	3
NDT A284	Introduction to Transcranial Doppler	1
NDT A285	Introduction to Nerve Conduction Velocity	1
NDT A286	Clinical Experience 3	4.5
NDT A288	Evoked Potentials	4
Units		13.5
Semester 2		
NDT A289	Clinical Experience 4	3.5
NDT A279	Pediatric Electroencephalography	2
NDT A282	NDT ABRET Registry Exam Prep	1
NDT A296	Introduction to Intraoperative Monitoring	1.5
NDT A297	Microcomputer Applications in Neurodiagnostics	1.5
NDT A298	Clinical Internship	2
PSG A100	Polysomnography Basics	1
Units		12.5
Total Units		83.5-88.5

¹ Math A030 or higher; *100-level Math courses satisfy AS Math Requirement and OCC AS GE AREA A2

² OCC AS GE AREA A2 - Required if 100-level MATH will not be taken to meet Math competency. If MATH A100 or higher will be taken, then needs to take 3-4 degree applicable elective units.

³ Acceptance into the OCC Neurodiagnostic Technology program required to begin major coursework (Cohort Restriction).