

NEURODIAGNOSTIC TECHNOLOGY, ASSOCIATE IN SCIENCE DEGREE

Banner Code: 1_AS_NDT

Control Number: 08657

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.

Associate in Science Degree Requirements

1. **UNIT REQUIREMENT** - 60 UNITS, with at least a 2.0 grade point average. At least 12 of the units must be earned at OCC, with a minimum of one course taken for a letter grade. At least 3 units in an advanced course from the program must be completed at OCC. A student must be enrolled at the time of application for graduation. Units earned at an accredited college or university on a credit/no credit basis will be counted toward the degree requirements of the college, to a maximum of 15 units.
2. **MAJOR REQUIREMENT** - Complete the AS major requirements.

3. **MATHEMATICS REQUIREMENT** - Demonstrate competence in mathematics by either obtaining a satisfactory grade (grade of "C" or better or "pass") in a mathematics course at or above the level of Intermediate Algebra as demonstrated by prior coursework, or by demonstrating competency that is comparable through the completion of a college-level math course that has Intermediate Algebra as a prerequisite: Psychology A160 or Math A100 or higher, with the exception of Math A220.
4. **GENERAL EDUCATION REQUIREMENT** - Students may choose to complete Option 1 (OCC AS GE) (<https://catalog.cccd.edu/orange-coast/general-education-patterns/associate-science-general-education-option-1/>), Option 2 (CSU GE) (<https://catalog.cccd.edu/orange-coast/general-education-patterns/associate-degree-general-education-option-2/>), or Option 3 (IGETC) (<https://catalog.cccd.edu/orange-coast/general-education-patterns/associate-degree-general-education-option-3/>) (<https://catalog.cccd.edu/orange-coast/general-education-patterns/associate-degree-general-education-option-3/>) to satisfy the general education requirement. See the General Education Patterns section of this catalog for more information.

Course	Title	Units
<i>Recommended Preparation</i>		
LIBR A100	Library Research and Information Competency	3
<i>Program Prerequisites</i>		
ALH A010	Health Occupations	0.5
ALH A111	Medical Terminology	3
BIOL A221	Anatomy-Physiology	4
<i>Required Courses</i>		
ALH A115	Patient Care	2.5
ALH A120	Human Diseases	2
ALH A130	Applied Pharmacology	3
NDT A110	Basic Electroencephalography	4
NDT A115	Advanced Electroencephalography	4
NDT A116	Clinical Experience 1	3.5
NDT A117	Clinical Experience 2	3
NDT A190	Introduction to Neuro Anatomy and Physiology	3
NDT A191	EEG Record Review-Normal	1
NDT A200	Neurodiagnostic Lab Practice	1
NDT A287	EEG Record Review-Abnormal	1.5
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	3.5
NDT A288	Evoked Potentials	4
NDT A289	Clinical Experience 4	2
NDT A296	Introduction to Intraoperative Monitoring	2
NDT A297	Microcomputer Applications in Neurodiagnostics	2
NDT A298	Clinical Internship	1
PSG A100	Polysomnography Basics	1
Total Units		59.5

Requirement	Units
Program Major Units	59.5
AS General Education Option 1, 2, or 3	Varies
Total Minimum Degree Units	71.5

Neurodiagnostic Technology Suggested Electives

CMST A100 Interpersonal Communication
 ELEC A140 Technical Electronics
 CDE A180 Child, Growth and Development
 MA A289 Clinical Medical Assisting II Specialty Procedures
 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 Prerequisites

Neurodiagnostic Technology Associate in Science Degree

Course	Title	Units
Required Courses		
CDE A180	Child, Growth and Development	3
PSG A150	Intermediate Polysomnography	3
PSG A160	Polysomnography Testing	2
PSG A165	Polysomnography Clinical 1	1
PSG A170	Polysomnographic Practice	0.5
PSG A175	Polysomnography Clinical 2	1
PSG A250	Polysomnography Record Review	2
PSG A260	Advanced Polysomnography	3
PSG A265	Polysomnography Clinical 3	2
PSG A270	Physician Lecture Series	1
PSG A285	Polysomnography Internship	2
RSPC A185	Respiratory Anatomy and Physiology	3
RSPC A265	Pulmonary Pathology	3
Total Units		26.5

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
OCC AS GE AREA A1- CHOOSE ONE		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		16.5
Semester 2		
ALH A111	Medical Terminology	3
OCC AS GE AREA C2- CHOOSE ONE		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	Intermediate Algebra	
or MATH A045	or Combined Elementary and Intermediate Algebra	
OCC AS GE AREA A2- CHOOSE ONE ²		3-4
Units		9-14
Year 2		
Semester 1		
ALH A115	Patient Care	2.5
ALH A130	Applied Pharmacology	3
NDT A110	Basic Electroencephalography	4
ALH A120	Human Diseases	2
Units		11.5
Semester 2		
NDT A200	Neurodiagnostic Lab Practice	1
NDT A115	Advanced Electroencephalography	4
NDT A116	Clinical Experience 1	3.5
NDT A190	Introduction to Neuro Anatomy and Physiology	3
NDT A191	EEG Record Review-Normal	1
NDT A287	EEG Record Review-Abnormal	1.5
Units		14
Summer		
NDT A117	Clinical Experience 2	3
Units		3
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	3.5
NDT A288	Evoked Potentials	4
Units		12.5
Semester 2		
NDT A289	Clinical Experience 4	2
NDT A296	Introduction to Intraoperative Monitoring	2
NDT A297	Microcomputer Applications in Neurodiagnostics	2

Course	Title	Units
NDT A298	Clinical Internship	1
PSG A100	Polysomnography Basics	1
Units		8
Total Units		74.5-79.5

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).