



Neurodiagnostic Technology A.A.S.

Career Community: Health and Human Service Careers

Curriculum Code: 1812

Effective: Fall 2022 – Summer 2024

Description

Neurodiagnostic Technology is the medical diagnostic field devoted to the recording and study of electrical activity in the brain and nervous system. Neurodiagnostic Technologists (EDT) are highly skilled professionals trained to perform electroencephalograms (EEG's) in medical facilities and outpatient centers under the direct supervision of a health care provider. The EEG program not only is designed to foster the skills and knowledge necessary for competent practice, but also places emphasis on professional attitudes, values and behaviors that encourage the professional growth of the individual student. Clinical learning experiences are provided by affiliating hospitals, clinics and other outpatient facilities. Didactic learning experiences occur in supportive college course work delivered through an online environment and laboratory practice. Both are equally important to the development of the competent Neurodiagnostic Technologist. The Neurodiagnostic Technology Program has been developed to be consistent with standards and requirements of the Commission on Accreditation of Allied Health Education Programs (CAAHEP). Upon completion of the EEG program graduates will be eligible to take the American Board of Registration in Electroencephalographic (ABRET) exam. Upon passing the ABRET exam, Neurodiagnostic Technologists have earned their Registered Electroencephalographic Technologist (R.EEG T) Certification.

Courses in this program are offered through the Michigan Community College Association/ Michigan Colleges Online, and taught by various colleges in the Educational Programs in Collaboration (EPiC) consortium.

Milestone

In addition to the required General Education courses in Math and English, completion of NDXT 120, NDXT 132, and NDXT 200 with a 2.5 or higher is a key component for success in completing this program. Knowledge obtained in these courses is the foundation for learning in other required courses. Students are encouraged to contact their faculty if they need additional assistance with learning the concepts presented in these courses.

Additional Information

Students must complete all non-NDXT courses prior to submitting their application for Program Approval. Courses in semesters I and II must be completed with a minimum 2.0 grade, with the exception of the General Education English Composition (second course)/Communications or Applied Communications requirement which must be completed with a minimum 2.5 grade. First semester NDXT courses require Program Approval. Applications must be submitted by May 15 and are available by contacting the Program Office at 517-483-1410. Once Program Approval is received, all students must complete each NDXT course with a minimum 2.5 grade to continue in the program and receive this degree. Students may not progress to the next semester until they have successfully completed all of the courses in the previous sequenced semester.

30 general NDXT credits may be awarded for a current Registered Electroencephalographic Technologist (R.EEG T) Certification and may be applied to the 30 required NDXT credits. For information regarding Licensure and Certification credit go to [Transfer Equivalencies – Licensure and Certification](#).

Contact Information

Contact the Medical Imaging Program, Health and Human Services Building, Room 108, telephone number 517-483-1410, or the Academic Advising Department, Gannon Building – StarZone, telephone number 517-483-1904.

General Education – Applied Degrees, Recommended Courses

(For the full list of options, see [General Education](#))

- English Composition or Applied English – *Select one*
ENGL 121, Composition I, 4 credits / 4 billing hours
ENGL 122, Composition II, 4 credits / 4 billing hours
ENGL 131, Honors Composition I, 4 credits / 4 billing hours
ENGL 132, Honors Composition II, 4 credits / 4 billing hours
- English Composition (second course)/Communications or Applied Communications Program of Study Required Courses for Admission will meet this requirement.
- Humanities and Fine Arts or Social Sciences or Applied Social Sciences Program of Study Required Courses for Admission will meet this requirement.
- Mathematics or Applied Mathematics Program of Study Required Courses for Admission will meet this requirement.
- Natural Sciences Lab or Applied Science and Technology Lab Program of Study Required Courses for Admission will meet this requirement.

Program of Study Required Courses for Admission, Limited Choice – English Composition (second course)/Communications – *Select one. This selection also*

satisfies the General Education English Composition (second course)/Communications or Applied Communications requirement.

Course Code	Course Title	Credit / Billing Hours
COMM 110	Communication in the Workplace	3 / 3
COMM 120	Dynamics of Communication	3 / 3
COMM 130	Fundamentals Public Speaking	3 / 3
COMM 240	Interpersonal Communication	3 / 3

Program of Study Required Courses for Admission, Limited Choice – Natural Sciences – *Select one. This selection also satisfies the General Education Natural Sciences Lab or Applied Science and Technology Lab requirement.*

Course Code	Course Title	Credit / Billing Hours
BIOL 145	Intro Anatomy and Physiology	4 / 6
BIOL 201 and 202	Human Anatomy and Human Physiology	8 / 11

Program of Study Required Courses for Admission – *MATH 119 (or any course from the General Education Mathematics College Algebra category) satisfies the General Education Mathematics or Applied Mathematics requirement. PSYC 200 satisfies the General Education Humanities and Fine Arts or Social Sciences or Applied Social Sciences requirement.*

Course Code	Course Title	Credit / Billing Hours
CHSE 117	Health Law and Ethics	2 / 2
CHSE 120	Medical Terminology	4 / 4
MATH 119	Math – Applications for Living	4 / 4
PFHW 163	Healthy Lifestyles	2 / 3
PSYC 200	Intro to Psychology	4 / 4
SOCL 120	Introduction to Sociology	4 / 4

Program of Study Required Courses

Course Code	Course Title	Credit / Billing Hours
NDXT 100	Neuroanatomy and Physiology	3 / 0*
NDXT 101	Neurodiagnostic Procedures	3 / 0*
NDXT 102	EEG Applications	3 / 0*
NDXT 120	EEG Pre-Clinical Preparation	3 / 0*
NDXT 130	Principles of EEG	2 / 0*
NDXT 131	Electricity Principles/Safety	1 / 0*
NDXT 132	EEG Instrumentation I	2 / 0*
NDXT 200	EEG Procedures & Pathology I	1 / 0*
NDXT 201	EEG Instrumentation II	2 / 0*
NDXT 202	EEG Quality Control	1 / 0*
NDXT 220	EEG Clinical Practice I	3 / 0*
NDXT 221	EEG Clinical Practice II	3 / 0*
NDXT 230	EEG Procedures & Pathology II	1 / 0*
NDXT 231	EEG Procedures & Pathology III	1 / 0*
NDXT 232	EEG Procedures & Pathology IV	1 / 0*

Minimum Total Credit Hours

61 credits / 34 billing hours*

*NDXT courses follow the Michigan Community College Association/Michigan Colleges Online tuition rates, and are not included in billing hours. Please contact the Medical Imaging Program at 517-483-1410 for current tuition rates.

Recommended Course Sequence

Semester I (Fall)
Gen Ed -English Composition/Applied English
MATH 119 (or other Gen Ed Mathematics College Algebra course)
PFHW 163
PSYC 200
SOCL 120

Semester II (Spring)
BIOL 145 or (BIOL 201 and BIOL 202)
CHSE 117
CHSE 120
COMM 110, 120, 130, or 240

Semester III (Fall)
NDXT 100
NDXT 101
NDXT 102
NDXT 120 – Milestone course

Semester IV (Spring)
NDXT 130
NDXT 131
NDXT 132 – Milestone course
NDXT 200 – Milestone course
NDXT 201
NDXT 202
NDXT 220

Semester V (Summer)
NDXT 221
NDXT 230
NDXT 231
NDXT 232

LCC makes every effort to limit revisions to the pathways during their effective timeframe. However, the College reserves the right to update certificate and degree title changes, and make course changes as needed, without prior notice.