

RESPIRATORY CARE

The Respiratory Care program is Elgin Community College's newest health professions program and was developed to meet the needs of the local healthcare community.

Respiratory therapists work in hospitals, cardiopulmonary diagnostic labs, cardiopulmonary rehabilitation centers, nursing homes, home health agencies, as well as on transport teams. Respiratory therapy professionals treat a range of patients, including newborn infants whose lungs are not fully developed to elderly patients with lung disease.

Upon completion of the Associate of Applied Science degree in Respiratory Care, graduates are eligible to take the Registered Respiratory Therapist (RRT) national credentialing exam. In Illinois, passing the RRT exam qualifies individuals to become licensed.

Accreditation

Elgin Community College is currently in the process of seeking CoARC accreditation for a respiratory care program. However, Elgin Community College can provide no assurance that accreditation will be granted by the CoARC.

Entrance Requirements

- Grade of C or better in BIO 110 or transfer credit equivalent to BIO 110.
- Grade of C or better in BIO 245 or equivalent (completed within the last 10 years).
- Grade of C or better in BIO 246 or equivalent (completed within the last 10 years).

Note: Applicants who have completed the additional general education courses listed below will earn extra points toward their admission score.

- Grade of C or better in ENG 101 or equivalent.
- Grade of C or better in ENG 102 or equivalent.
- Grade of C or better in PSY 100 or equivalent.
- Grade of C or better in HUM 216 or equivalent.

Admission

Approximately 15 students will be admitted to the Respiratory Care Program each spring semester. The application deadline for the Respiratory Care program is October 15. Applicants are responsible for ensuring that all admission materials are submitted by the deadline and that all admission requirements have been met.

Program Requirements

- Applicants must be legal residents of Community College District 509. Working in District 509 does not meet this requirement. International students on an F-1 visa are not eligible to apply to the Respiratory Care program.
- Students must achieve a grade of C or better in all respiratory care and general education courses.

- Students must provide their own uniforms and transportation to and from all clinical sites.
- Students must submit medical forms and required titers and immunizations, proof of health insurance, American Heart Association Basic Life Support for Healthcare Providers (BLS) CPR certification, and complete drug testing and criminal background checks through the CastleBranch system within 45 days before starting the Respiratory Care program.
- Students demonstrating a positive drug test or background check will be denied admission to the Respiratory Care program.
- Students demonstrating a positive drug test or background check while enrolled in the Respiratory Care program will be dismissed from the program.
- Graduates will demonstrate competence in the cognitive (knowledge), psychomotor (skills), and affective (behavior) learning domains of respiratory care practice as performed by Registered Respiratory Therapists (RRTs).
- Graduates will effectively communicate with the healthcare team, patients, and their family.
- Graduates will demonstrate professional and ethical behavior.
- Graduates will be prepared to pass the National Board of Respiratory Care (NBRC) registry exams.

Respiratory Care-Associate of Applied Science

Course	Title	Credit Hours
Entrance Requirements		
BIO 110	Principles of Biology	4
BIO 245	Human Anatomy and Physiology I	4
BIO 246	Human Anatomy and Physiology II	4
Total		12
First Semester		
RCT 101	Introduction to Respiratory Care	3
RCT 110	Cardiopulmonary Anatomy & Physiology	3
RCT 120	Patient Assessment	3
RCT 130	Respiratory Care Procedures I	5
Total		14
Second Semester		
RCT 150	Cardiopulmonary Diseases	3
RCT 160	Respiratory Care Procedures II	4
RCT 170	Clinical Practice I	3
Total		10
Third Semester		
RCT 140	Respiratory Care Pharmacology	3
RCT 180	Respiratory Diagnostic Testing & Rehab	3
RCT 190	Respiratory Care Procedures III	3
ENG 101	English Composition I	3
Total		12
Fourth Semester		
RCT 210	Neonatal & Pediatric Care	2
RCT 220	Respiratory Care Procedures IV	4
RCT 230	Clinical Practice II	3
PSY 100	Intro to Psychology	3

ENG 102	English Composition II	3
Total		15
Fifth Semester		
RCT 240	Respiratory Care Capstone	3
RCT 250	Clinical Practice III	3
HUM 216	Ethics	3
Total		9
Program Total		72

Respiratory Care Courses

All RCT courses numbered 100 and above may be applied to the major field and elective requirement for the Associate in Arts and Associate in Science degrees.

RCT 101 Introduction to Respiratory Care (3) 3,0

This course introduces the Respiratory Care profession. Topics covered include the history of Respiratory Care as well as roles, responsibilities, and opportunities. Governing agencies, basic science and math, professionalism, cultural diversity, ethics, and emergency preparedness is covered as well. (1.2) Proficiency Credit Not Available Pass/No Credit Not Available.

In-District Tuition/Fees: \$405 (effective 2024/25 academic year)

In-district tuition rates are subject to change based on Board approval.

Prerequisite: Admission to the Respiratory Care program. Concurrent enrollment in RCT 110, RCT 120, RCT 130 or consent of instructor.

Semester(s) Offered: Spring

RCT 110 Cardiopulmonary Anatomy & Physiology (3) 3,0

This course examines the cardiopulmonary anatomy and physiology as related to clinical practice. Ventilation, circulation, blood gas transport and acid-base balance are covered. (1.2) Proficiency Credit Not Available Pass/No Credit Not Available.

In-District Tuition/Fees: \$405 (effective 2024/25 academic year)

In-district tuition rates are subject to change based on Board approval.

Prerequisite: Admission into the Respiratory Care Program and concurrent enrollment in RCT 101, RCT 120, and RCT 130 or consent of instructor.

Semester(s) Offered: Spring

RCT 120 Patient Assessment (3) 3,0

This course examines gathering information from the medical record, performing a patient interview, as well as performing a physical exam. Viewing radiological and laboratory results are included. Discussion will take place on how this data is brought together to arrive at respiratory conditions as well as patient response to therapy. Charting expectations and orientation to charting software will be discussed. (1.2) Proficiency Credit Not Available Pass/No Credit Not Available.

In-District Tuition/Fees: \$405 (effective 2024/25 academic year)

In-district tuition rates are subject to change based on Board approval.

Prerequisite: Admission into the Respiratory Care program and concurrent enrollment in RCT 101, RCT 110, and RCT 130 or consent of instructor.

Semester(s) Offered: Spring

RCT 130 Respiratory Care Procedures I (5) 4,2

This course provides classroom instruction and laboratory practice for various general respiratory care procedures such as patient assessment equipment, oxygen therapy, humidity, and aerosol therapy as well as hyperinflation therapy. Proficiency Credit Not Available Pass/No Credit Not Available.

In-District Tuition/Fees: \$725 (effective 2024/25 academic year)

In-district tuition rates are subject to change based on Board approval.

Prerequisite: Admission into the Respiratory Care program. And concurrent enrollment in RCT 101, RCT 110, RCT 120 or consent of instructor.

Semester(s) Offered: Spring

RCT 140 Respiratory Care Pharmacology (3) 3,0

This course discusses general principles of pharmacology and specific medications for acute and chronic illness. Bronchodilators, microkinetic, inhaled antibiotics, inhaled anti-inflammatories are pulmonary medication categories that will be covered. (1.2) Proficiency Credit Not Available Pass/No Credit Not Available.

In-District Tuition/Fees: \$405 (effective 2024/25 academic year)

In-district tuition rates are subject to change based on Board approval.

Prerequisite: Grade of C or better in RCT 101, RCT 110, RCT 120, RCT 130 and concurrent enrollment in RCT 150, RCT 160, RCT 170 or consent of instructor.

Semester(s) Offered: Fall

RCT 150 Cardiopulmonary Diseases (3) 3,0

This course discusses etiology, diagnosis, pathophysiology, symptoms, and treatment of various pulmonary and related diseases. (1.2) Proficiency Credit Not Available Pass/No Credit Not Available.

In-District Tuition/Fees: \$405 (effective 2024/25 academic year)

In-district tuition rates are subject to change based on Board approval.

Prerequisite: Grade of C or better in RCT 101, RCT 110, RCT 120, RCT 130 and concurrent enrollment in RCT 140, RCT 160, RCT 170 or consent of instructor.

Semester(s) Offered: Summer

RCT 160 Respiratory Care Procedures II (4) 3,2

Continuation of general respiratory care procedures such as inhaled medication delivery, secretion mobilization, airway clearance, and airway management will be discussed. (1.2) Proficiency Credit Not Available Pass/No Credit Not Available.

In-District Tuition/Fees: \$590 (effective 2024/25 academic year)

In-district tuition rates are subject to change based on Board approval.

Prerequisite: Grade of C or better in RCT 101, RCT 110, RCT 120, RCT 130 and concurrent enrollment in RCT 140, RCT 150, RCT 170 or consent of instructor.

Semester(s) Offered: Summer

RCT 170 Clinical Practice I (3) 0,15

This course provides clinical experience at an affiliated hospital under the direct supervision of a clinical preceptor. Emphasis is placed on general respiratory care procedures. (1.2) Proficiency Credit Not Available Pass/No Credit Not Available.

In-District Tuition/Fees: \$405 (effective 2024/25 academic year)

In-district tuition rates are subject to change based on Board approval.

Prerequisite: Grade of C or better in RCT 101, RCT 110, RCT 120, RCT 130 and concurrent enrollment in RCT 140, RCT 150, RCT 160 or consent of instructor.

Semester(s) Offered: Summer

RCT 180 Respiratory Diagnostic Testing & Rehab (3) 2,2

Students will be introduced to various diagnostic testing such as Pulmonary Function testing, stress testing, and electrocardiograms. Obtaining arterial blood gases and pulmonary rehabilitation will be discussed. These will be discussed in lecture and then practiced in the lab setting. (1.2) Proficiency Credit Not Available Pass/No Credit Not Available.

In-District Tuition/Fees: \$405 (effective 2024/25 academic year)

In-district tuition rates are subject to change based on Board approval.

Prerequisite: Grade of C or better in RCT 170 and concurrent enrollment in RCT 190 or consent of instructor.

Semester(s) Offered: Fall

RCT 190 Respiratory Care Procedures III (3) 2,2

Mechanical ventilation topics such as modes of ventilation, indications, hazards, weaning, and care of the patient will be discussed in lecture and practiced in the lab setting. (1.2) Proficiency Credit Not Available Pass/No Credit Not Available.

In-District Tuition/Fees: \$405 (effective 2024/25 academic year)

In-district tuition rates are subject to change based on Board approval.

Prerequisite: Grade of C or better in RCT 170 and concurrent enrollment in RCT 180 or consent of instructor.

Semester(s) Offered: Fall

RCT 210 Neonatal & Pediatric Care (2) 2,0

Anatomy and physiology with an emphasis on patients with cardiopulmonary disorders will be discussed. Management of patients who require mechanical ventilation and high frequency oscillation will also be addressed. NRP & PALS certificate will be obtained. (1.2) Proficiency Credit Not Available Pass/No Credit Not Available.

In-District Tuition/Fees: \$270 (effective 2024/25 academic year)

In-district tuition rates are subject to change based on Board approval.

Prerequisite: Grade of C or better in RCT 180 and RCT 190 and concurrent enrollment in RCT 220, RCT 230 or consent of instructor.

Semester(s) Offered: Spring

RCT 220 Respiratory Care Procedures IV (4) 3,2

Students will expand concepts and apply to mechanical ventilation and procedures in the critical care setting. Topics such as management of unconventional modes of ventilation, hemodynamics, graphics interpretation, and specialty medical gases will be covered. Students will learn intubation techniques and carbon dioxide measurement and interpretation. Specialty care areas will be discussed such as Sleep lab and home care. (1.2) Proficiency Credit Not Available Pass/No Credit Not Available.

In-District Tuition/Fees: \$540 (effective 2024/25 academic year)

In-district tuition rates are subject to change based on Board approval.

Prerequisite: Grade of C or better in RCT 180, RCT 190 and concurrent enrollment in RCT 210, RCT 230 or consent of instructor.

Semester(s) Offered: Spring

RCT 230 Clinical Practice II (3) 0,15

This course provides clinical experience at an affiliated hospital under the direct supervision of a clinical preceptor. Observation, practice, and evaluation of advanced respiratory care skills will take place in the critical care setting. Advanced patient assessment will be included. (1.2) Proficiency Credit Not Available Pass/No Credit Not Available.

In-District Tuition/Fees: \$405 (effective 2024/25 academic year)

In-district tuition rates are subject to change based on Board approval.

Prerequisite: Grade of C or better in RCT 180, RCT 190 and concurrent enrollment in RCT 210, RCT 220 or consent of instructor.

Semester(s) Offered: Spring

RCT 240 Respiratory Care Capstone (3) 3,0

Students will prepare for the National Board for Respiratory Care (NBRC) Therapist Multiple Choice Exam through discussion, case studies, computer software, and mock examinations. Advanced Cardiac Life Support Certification will take place as well. (1.2) Proficiency Credit Not Available Pass/No Credit Not Available.

In-District Tuition/Fees: \$405 (effective 2024/25 academic year)

In-district tuition rates are subject to change based on Board approval.

Prerequisite: Grade of C or better in RCT 210, RCT 220, RCT 230 and concurrent enrollment in RCT 250 or consent of instructor

Semester(s) Offered: Summer

RCT 250 Clinical Practice III (3) 0,15

This course provides clinical experience at an affiliated hospital under the direct supervision of a clinical preceptor. Further completion of critical care skills will take place as well as specialty care rotations. (1.2) Proficiency Credit Not Available Pass/No Credit Not Available.

In-District Tuition/Fees: \$405 (effective 2024/25 academic year)

In-district tuition rates are subject to change based on Board approval.

Prerequisite: Grade of C or better in RCT 210, RCT 220, RCT 230 and concurrent enrollment in RCT 240 or consent of instructor.

Semester(s) Offered: Summer