

# RESPIRATORY CARE

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Degree: Master of Science

## Introduction

The online Master of Science degree program in Respiratory Care (MSRC) is designed for Registered Respiratory Therapists looking to strengthen their career and become an expert in the field.

The MSRC program is offered in a fully online format, structured to fit the busy lifestyle of working students. The 33 credit hour master's program may be completed in as little as 1 year with full-time study. The MSRC consists of 5 core courses and 6 specialty track courses. The program provides students with the opportunity to select one of the specialty areas below:

- Respiratory Therapeutics
- Respiratory Care Education

Students in the online Master's Degree in Respiratory Care program can expect to prepare for clinical practice, undergo leadership training in management, supervision, education and research, develop skills to formulate appropriate questions, organize and test hypotheses, and apply research results to practice, among other acquired skills. More information can be found at the Respiratory Care program's website (<https://www.canisius.edu/academics/programs/respiratory-care>).

## Admission

Applications are processed on a rolling basis and are considered as they are received for each term. We recommend submitting all materials required for admission at least 30 days prior to the start of the term you wish to begin. Earlier application will ensure the best scheduling options, as some course sections may become unavailable. Terms are eight weeks in length, and students may start in the fall, spring, or summer semesters. The online application can be submitted with no application fee.

To qualify for admission, all students must:

- Complete the graduate admissions application.
- Submit one (1) official undergraduate transcript showing completion of a baccalaureate degree from an accredited institution of higher learning with a minimum GPA of 2.70.
- Submit two (2) letters of recommendation.
- Submit a current resume.
- Provide evidence of current licensure as a Registered Respiratory Therapist.
- Provide a statement of purpose of approximately 500 words explaining your motivation for pursuing the MS in Respiratory Care. The statement may be submitted in the essay section of the graduate application.
- Complete a phone or face-to-face interview with the program director or a department representative.

**Transfer credit:** Previous graduate level transfer credits will be assessed on a case-by-case basis.

## Program Details

### Academic Standing

Students must maintain a GPA of 3.00 to graduate from the program. If the GPA drops below 3.00, the student will be placed on academic probation. If the student does not bring his/her cumulative GPA above 3.00 by the end of the next term, the student may be dismissed from the program. A student may also be academically dismissed from the program by receiving more than 2 grades below B-.

### Curriculum

Total credit hours = 33

Every student must complete 21 credit hours of core courses and each of the courses in one (1) of the specialty tracks (12 credits).

Code	Title	Credits
<b>Core Courses</b>		
ALH 501	Health Promotion and Disease Prevention	3
RES 512	Pulmonary Function Testing	3
RES 618	Pulmonary and Cardiac Rehabilitation	3
ALH 602	Cardiopulmonary Pathophysiology	3
ALH 621	Cardiopulmonary Pharmacodynamics	3
ALH 631	Research Methods in Allied Health	3
ALH 632	Data Analysis and Statistics	3
<b>Specialty Track</b>		
Select one of the specialty tracks listed below		12
Total Credits		33

### Specialty Track 1: Respiratory Therapeutics

Code	Title	Credits
ALH 503	Medical Nutrition Therapy	3
RES 612	Advanced Cardiopulmonary Monitoring	3
RES 615	Advanced Topics in Ventilatory Support	3
ALH 689	Master's Project <sup>1</sup>	3
Total Credits		12

<sup>1</sup> Students will receive a grace period of 1 term to complete the thesis without having to register for ALH 700. However, any student who has not completed their final thesis/project by the end of the grace period will be registered for the 1-credit hour course, ALH 700 for that semester, and then for each subsequent semester until the project/thesis is complete.

### Specialty Track 2: Respiratory Care Education

Code	Title	Credits
RES 522	Adult Learning Theory	3
ALH 645	Teaching Technology for Health Leaders	3
ALH 689	Master's Project	3
ALH 699	Masters Project II <sup>1</sup>	3
Total Credits		12

<sup>1</sup> Students will receive a grace period of 1 term to complete the thesis without having to register for ALH 700. However, any student who has not completed their final thesis/project by the end of the grace period will be registered for the 1-credit hour course, ALH 700 for that semester, and then for each subsequent semester until the project/thesis is complete.

## Learning Goals & Objectives

### Learning Goal 1

**Candidates in the Respiratory Care program will demonstrate content knowledge and professional knowledge necessary for successful advanced performance in respiratory therapy.**

**Students will:**

- Assess and evaluate patient's cardiopulmonary status, to provide appropriate care by applying patient care protocols, and to evaluate the medical and cost effectiveness of their care.

### Learning Goal 2

**Candidates in the Respiratory Care program will demonstrate professional skills and dispositions necessary for successful advanced performance in respiratory therapy.**

**Students will:**

- Develop a better understanding of therapeutic techniques, medications, and medical devices to evaluate and treat patients with increasingly complex cardiopulmonary disorders.
- Develop clinical knowledge to become specialists in the areas of critical care, pulmonary function technology and cardiopulmonary diagnostics, polysomnography, and other clinical areas, as needed.

### Learning Goal 3

**Candidates in the Respiratory Care program will demonstrate willingness to use their advanced skills to benefit and serve patients who utilize respiratory therapy services while maintaining an environment that offers a commitment to social justice with respect and dignity to all.**

**Students will:**

- Model and promote dignity and respect to all patients while administering appropriate care and assistance in respiratory care.

### Learning Goal 4

**Candidates in the Respiratory Care program will continuously assess and refine their professional practice as they build a large collection of research-based knowledge, skills, and attitudes for ensuring professionalism throughout their professional career as respiratory therapists.**

**Students will:**

- Demonstrate professional educational knowledge necessary to teach at college and university based respiratory care educational programs.
- Demonstrate ability to formulate appropriate questions, organize and test hypotheses, and apply research results to the practice of respiratory care.
- Act with integrity and fairness to ensure a professional system of accountability for every student's academic and social success and will model principles of self-awareness, reflective practice, transparency, and ethical behavior.

## Learning Goal 5

**Candidates in the Respiratory Care program will become acquire the necessary knowledge to become effective leaders in their field by developing confidence in their own decision-making with respect to their patients, the community and their peers.**

**Students will:**

- Demonstrate critical thinking, decision-making, and competence to perform newly expected responsibilities.
- Demonstrate leadership in the areas of management, supervision, education and research.
- Demonstrate ability to plan, develop, and deliver high quality, cost-effective health care services.

## Courses

In addition to the courses listed below, courses for this program with the Allied Health (ALH) prefix can be found on the Professional Studies page (<http://catalog.canisius.edu/graduate/school-education-human-services/professional-studies/#coursestext>).

**RES 512 Pulmonary Function Testing** **3 Credits**

A study of pulmonary diagnostic techniques, with an emphasis on pulmonary function testing and interpretation.

**Offered:** every spring, online only.

**RES 522 Adult Learning Theory** **3 Credits**

The concept of lifelong learning has become an increasing reality as adults continually engage in learning activities, whether through their employer, institutions of higher education, or self-directed study. This course will examine the social and psychological aspects of adult development and learning, including the various motivations of adult learners. Students will also learn various methods of training and development, as well as specific instructional practices.

**Offered:** every fall, online only.

**RES 612 Advanced Cardiopulmonary Monitoring** **3 Credits**

This course is an overview of invasive and noninvasive cardiopulmonary monitoring, emphasizing theory of operation and techniques. Topics include physiologic principles of hemodynamic monitoring, pulmonary artery catheter use, respiratory gas monitoring, noninvasive and minimally-invasive hemodynamic monitoring, clinical applications of hemodynamic and respiratory gas monitoring, work of breathing determinations, and respiratory muscle strength.

**Prerequisites:** ALH 602 and ALH 621.

**Offered:** every fall, online only.

**RES 615 Advanced Topics in Ventilatory Support** **3 Credits**

Advanced study in methods of mechanical ventilatory support. Patient assessment by advanced monitoring is stressed, with attention to patient ventilator interactions, optimization of ventilatory support, and weaning of marginal patients. New ventilation technology and modes of support are discussed.

**Prerequisite:** ALH 602 and 621

**Offered:** every spring, online only.

**RES 618 Pulmonary and Cardiac Rehabilitation 3 Credits**

This course explores pulmonary/cardiac rehabilitation clinics and combines exercise training with behavioral and educational programs designed to help patients with COPD and cardiac issues control symptoms and improve day-to-day activities. We will look at the team approach--patients work closely with their doctors; nurses; respiratory, physical, and occupational therapists; psychologists, exercise specialists; and dietitians. We will also explore the differences between cardiac and pulmonary rehabilitation.

**Offered:** every spring, online only.