

# Respiratory Care

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## Department Information

- **Department Location:**  
Sudro Hall
- **Department Phone:**  
701-231-8713
- **Department Web Site:**  
[www.ndsu.edu/alliedsciences/](http://www.ndsu.edu/alliedsciences/)
- **Degrees Offered:**  
B.S.
- **Official Program Curriculum:**  
[bulletin.ndsu.edu/undergraduate/program-curriculum/respiratory-care/](http://bulletin.ndsu.edu/undergraduate/program-curriculum/respiratory-care/)

Respiratory Care (RC) is an allied health profession that involves the evaluation, treatment, and education of patients with cardiopulmonary (heart-lung) disorders. Respiratory therapists (RTs) work closely with patients, physicians, nurses, and other health care professionals in critical care, emergency rooms, newborn nurseries and pediatrics, medical units, and home care. RTs administer a variety of treatments, gases, and medications to alleviate a patient's breathing problems, manage mechanical ventilators and life support equipment, direct pulmonary rehabilitation activities, perform diagnostic tests that assist physicians to diagnose and monitor lung disease and sleep disorders, and educate patients and their families about their disease process, therapy and wellness. Graduates readily find employment in hospital, clinic, and home care settings throughout the country. Additional career opportunities exist in management, education, sleep centers, research, sales, and public health. According to the U.S. Department of Labor Bureau of Labor Statistics (<https://www.bls.gov>), employment of respiratory therapists is expected to grow faster than the average for all occupations through the year 2026. This increase is attributed to a substantial growth in number of the middle-aged and elderly populations that will increase the incidence of respiratory conditions like chronic obstructive pulmonary disease (COPD) and pneumonia.

A Bachelor of Science degree, Respiratory Care major, from North Dakota State University, includes two to three years of academic courses on campus and a 15-month full-time professional-level internship in the Respiratory Care Department at Sanford Medical Center, Fargo, North Dakota. The NDSU/Sanford Respiratory Care Program is accredited by the Commission on Accreditation for Respiratory Care (CoArc). Graduates are eligible to write the national certifying examinations administered by the National Board of Respiratory Care (NBRC) that lead to the Registered Respiratory Therapist (RRT) credential. NDSU graduates have enjoyed excellent employment opportunities and pass rates on the certifying exams.

Academic courses include chemistry, physics, anatomy and physiology, microbiology, college algebra, psychology, and computer science, in addition to general education courses. The full-time professional internship at Sanford Medical Center Fargo consists of lecture, laboratory, and clinical education onsite at the hospital that prepares the student to enter the profession of respiratory care. Near the end of the internship, students choose a specialty area for a focused clinical experience (RC 494). Common specialty areas include neonatal/pediatric general and intensive care, adult general and intensive care, diagnostics, pulmonary rehabilitation, home care, education, and management.

Qualified students apply for the professional internship during the spring of the academic year they will complete all prerequisite college courses. Applications are available from the Department of Allied Sciences. The application deadline is March 1 annually. Admission is selective and based upon successful completion of all prerequisite courses with a minimum grade of C, cumulative and "core" course grade point averages (a minimum of 2.50 is required; a maximum of core course attempts is two), references, related experience, interview, and compliance with criminal background and student conduct requirements. An admission committee selects the interns. Students admitted to the Respiratory Care internship must possess the ability to complete the entire curriculum which requires the student to meet designated technical standards, or request accommodations to execute these skills. Technical standards include cognitive, physical, motor and tactile abilities, visual acuity, and speaking, hearing, and interactive requirements.

It is highly recommended that students interested in Respiratory Care meet with the RC advisor to discuss degree requirements and internship admission, and create an individualized plan of study at least one year prior to anticipated internship application. Information about the profession, curriculum, internship, technical standards, and advising contacts are available from the Department of Allied Sciences (<https://www.ndsu.edu/alliedsciences>).

## Plan of Study

Please note this is a sample plan of study and not an official curriculum. Actual student schedules for each semester will vary depending on start year, education goals, applicable transfer credit, and course availability. Students are encouraged to work with their academic advisor on a regular basis to review degree progress and customize an individual plan of study.

First Year					
Fall	Credits	Spring	Credits		
CHEM 121 <sup>†</sup>	3	CHEM 122 <sup>†</sup>	3		
CHEM 121L <sup>†</sup>	1	CHEM 122L <sup>†</sup>	1		
CHP 190	2	MICR 202 <sup>†</sup>	2		
CSCI 114	3	MICR 202L <sup>†</sup>	1		
ENGL 120 <sup>*</sup>	3	COMM 110	3		
MATH 103 <sup>†</sup>	3	PSYC 111	3		
		Humanities & Fine Arts (A)/ Cultural Diversity (D)	3		
15		16			
Second Year					
Fall	Credits	Spring	Credits		
BIOL 220 <sup>†</sup>	3	BIOC 260 <sup>†</sup>	4		
BIOL 220L <sup>†</sup>	1	BIOL 221 <sup>†</sup>	3		
CHEM 240 <sup>†</sup>	3	BIOL 221L <sup>†</sup>	1		
RC 200	1	CHP 125 <sup>†</sup>	1		
Social & Behavioral Sciences (B)/Global Perspectives (G)	3	Humanities & Fine Arts (A)	3		
STAT 330	3	PHYS 120 <sup>†</sup>	3		
Wellness (W)	2	Special Elective (dept. approved)	3		
16		18			
Third Year					
Fall	Credits	Spring	Credits	Summer	Credits
RC 496 <sup>**</sup>	15	RC 496 <sup>**</sup>	15	RC 496 <sup>**</sup>	13
15		15			13
Fourth Year					
Fall	Credits				
RC 496 <sup>**</sup>	8				
RC 494 <sup>**</sup>	4				
Upper Division Writing (C; 300-400)	3				
Special Elective (dept. approved)	3				
18					

Total Credits: 126

- \* All students are required to successfully earn credit for Engl 110 and Engl 120. Enrollment is based on English Placement. Upon completion of Engl 120 with a "C" grade or higher, students will be awarded placement credit (4) for Engl 110.
- \*\* Credits earned while participating in the Sanford Medical Center Fargo RC internship. The internship is 15 months, including one summer session.
- † Indicates "core" course. A minimum "core" course GPA of 2.50 is required. "Core" courses must be completed with a grade of "C" within two attempts.