



# ADVANCED RESPIRATORY CARE

## Advanced Respiratory Care Certification, A.A.S. In Respiratory Therapy from CCA

Provide critical care and therapy for patients with various respiratory conditions.

Upon graduation students will be eligible to take the NBRC Registered Respiratory Therapist Exams (RRT). The curriculum includes off-site clinicals and on-site simulation labs. The respiratory therapy program will help students learn a variety of skills used in the industry, including the following:

- Implement advanced life support techniques
- Treat medical emergencies in collaboration with health care teams
- Monitor patient conditions during treatments, procedures, or activities
- Inform medical professionals regarding patient conditions and care
- Assist healthcare practitioners during examinations or treatments

### Prerequisites:

- Applicants are required at minimum to have BIO 2101 Human Anatomy & Physiology I for entrance into the Respiratory Therapy Program
- All credits must be from CCA, and applicants must be able to provide unofficial transcripts. All credits from other institutions must be evaluated by CCA prior to enrollment.
- Applicants must set up an interview with the program director for admission
- Must have a high school diploma or G.E.D.

### Suggested educational levels:

- English literacy (reading, writing, speaking, and listening)
- Understanding of basic algebra

### Suggested physical abilities:

- Capable of lifting 25 pounds
- Capable of sustained activity for prolonged periods of time

### Class Hours:

- Year 1: 8:00am -3:00pm Mon., Wed., & Fri.
- Year 2: 8:00am -3:00pm Mon. & Wed.
- Clinical days vary Program is 4 semesters in length, with start dates in Fall.

## Tuition and Credit Hour Calculation

### Semester 1

\$2,192.00 (Tuition)  
+ \$210.00 (Credit Hour Fee)  
\$2,402.00

### Semester 2

\$1,644.00 (Tuition)  
+ \$170.00 (Credit Hour Fee)  
\$1,814.00

### Semester 3

\$1,233.00 (Tuition)  
+ \$140.00 (Credit Hour Fee)  
\$1,373.00

### Semester 4

\$2,055.00 (Tuition)  
+ \$200.00 (Credit Hour Fee)  
\$2,255.00

Based on Colorado Resident In-State Tuition

## Estimated Program Costs (to be paid at Picken's payment office)

### Tuition and Credit Hour Fees:

Semester 1: \$1,814.00  
Semester 2: \$1,814.00  
Semester 3: \$1,961.00  
Semester 4: \$2,255.00

### Required On Campus Costs:

Program Charges: \$500.00 (each semester)  
Student ID: \$10.00 (each year)  
Proxy Disc: \$15.00 (semester 1)  
CTS0 Charge: \$20.00 (each year)  
Books: \$654.00 (+ tax)  
RT Kit: \$125.00 (+ tax) (Required for RCA 1032)  
Sims Lab semester 1: \$200.00  
Sims Lab semester 3: \$200.00  
My Clinical Exchange: \$50.00 (semester 1)  
Trajecsys: \$150.00 (semester 1)  
Clinical Charges semester 2: \$3,600.00  
Clinical Charges semester 4: \$3,600.00  
Course/Clinical make-up fee: \$1,260.00  
Heart Code BLS/CPR Card: \$7.00 (semester 2)  
Exit Exam: \$110.00

### Estimated Total:

Advanced Respiratory Care Certificate: \$19,888.00 (+tax)

## Additional Relevant Costs (estimated)

### Optional Costs:

Heart Code BLS Course Charge Supplies: \$25.00 (+ tax)  
Heart Code CPR Online Certification Course: \$28.50 (+ tax)  
Uniform/Scrubs: \$75.00-\$100.00  
Stethoscope: \$75.00  
Health Exam: \$80.00-\$120.00 (exam arranged with private physician)  
Hepatitis Vaccine: \$150.00 (vaccine arranged with private physician)  
AARC Annual Membership: \$50.00 (yearly)  
CRCS Conference: \$250.00  
CCS Background Check and Drug Screen: \$100.00  
Drug screening includes testing for marijuana. Additional fees may be required. To be done through Castle Branch [ccs.castlebranch.com](http://ccs.castlebranch.com).  
ACLS Class and Book: \$200.00  
Exit Exam Prep: \$350.00

Credits:  
52

Length:  
2 years

Cost:  
\$19,888



Cost and information revised March 2025  
500 Airport Blvd., Aurora, CO 80011 • [www.pickenstech.org](http://www.pickenstech.org) • (303)344-4910

## Courses required for this certificate: Semester 1

<b>RCA 1005 Introduction to Respiratory Care</b>	<b>1</b>
Introduces the profession of respiratory care including history of the profession; current and future role of the respiratory care professional; role, function and interrelationships of the several professional organizations; and medical terminology.	
<b>RCA 1021 Fundamentals of Clinical Skills</b>	<b>3</b>
Provides information necessary to function safely and efficiently in the clinical setting. It includes the study of universal precautions, infection control, asepsis, body mechanics, patient charting, communication skills, organizational skills, and basic patient assessment.	
<b>RCA 1051 Cardiopulmonary Anatomy and Physiology</b>	<b>3</b>
Focuses on the structure of the pulmonary and cardiovascular systems. Addresses independent functional relationships.	
<b>RCA 2080 Internship I</b>	<b>5</b>
Focuses on the care and analysis of the noncritical patient. Procedures include those presented in RCA 131 and RCA 132.	

## Courses required for this certificate: Semester 3

<b>RCA 2030 Critical Care I</b>	<b>2</b>
Focuses on the care of critically ill patients. Includes advanced pulmonary physiology and pathophysiology, assessment and monitoring of acute and chronic respiratory failure, mechanical ventilation, and emergency respiratory care. Incorporates a laboratory portion that enables the student to develop skills essential for the assessment and treatment of the critically ill.	
<b>RCA 2051 Critical Care II</b>	<b>3</b>
Focuses on selected topic areas in critical care. Includes both technical and management concerns in the intensive care setting.	
<b>RCA 2052 Cardiopulmonary Diagnostics II</b>	<b>1</b>
Explores the procedures used in the diagnosis of pulmonary disease through pulmonary function testing.	
<b>RCA 2053 Perinatal &amp; Pediatric Respiratory Care</b>	<b>3</b>
Focuses on the pathophysiology and technology that relates to the neonatal-pediatric patient.	
<b>RCA 2080 Internship II</b>	<b>4</b>
Focuses on the care and analysis of the critically ill patient. Rotations into specialty areas are carried out as the schedule permits.	



**COMMUNITY  
COLLEGE  
of AURORA**

**Accreditation: AAS Respiratory Therapy**  
The Respiratory Therapy Technology (AAS) Program is accredited by the Commission on Accreditation for Respiratory Care: CoARC [www.coarc.com](http://www.coarc.com)

## Courses required for this certificate: Semester 2

<b>RCA 1032 Basic Techniques in Respiratory Care II</b>	<b>5</b>
Develops the knowledge of oxygen systems and humidity & aerosol therapy. Prepares the student in the techniques of spirometry, hyperinflation techniques and bronchial hygiene. Airway management skills are introduced.	
<b>RCA 1052 Cardiopulmonary Pathology</b>	<b>4</b>
Focuses on a study of the diseases affecting the lungs and pulmonary circulation. Emphasizes clinical manifestations and the relationship of pathology and treatment.	
<b>RCA 1065 Pharmacology of Cardiopulmonary Care</b>	<b>3</b>
Focuses on a study of the principles of pharmacology and the pharmacologic properties and application of drugs commonly employed in the treatment of cardiopulmonary disease.	

## Courses required for this certificate: Semester 4

<b>RCA 2032 Advanced Monitoring</b>	<b>2</b>
Develop the necessary skills required of Respiratory Care professionals to include monitoring and assessment of the patient requiring intensive care using both non-invasive and invasive data. Topics include: introduction to hemodynamic values and interpretation of the results; characteristics and indications of both bronchoscopy and sleep disorders; and introduction to research.	
<b>RCA 2059 Advanced Medical Ventilation</b>	<b>3</b>
Provide the student with the opportunity to thoroughly probe into the function of mechanical ventilators and how ventilators actually work. It is important for the student to adjust the way they think about ventilators and how to begin to master their operation.	
<b>RCA 2083 Internship III</b>	<b>9</b>
Continues to address the care and analysis of the critically ill patient and specialty rotations. Attempts to more closely evaluate the student's ability to manifest critical judgments in solving clinical problems and understanding professional/departmental activities.	
<b>RCA 2089 Capstone</b>	<b>1</b>
A demonstrated culmination of learning within a given program of study.	

## ADVANCED RESPIRATORY CARE CERTIFICATE

**Certificate Total:** Clock Hours: 110 Credit Hours: 52

**Certificate Length:** 4 semesters

## General Education requirements are to be taken at Community College of Aurora to complete an Associates Degree:

*Students must meet all prerequisite requirements for each course listed below. It is strongly recommended to take general education courses prior to enrolling. All 26 general education requirements from Community College of Aurora must be completed before the completion of the final semester in the Pickens program.*

**BIO 2101 Human Anatomy & Physiology I**

**BIO 2102 Human Anatomy & Physiology II**

**BIO 2104 Microbiology**

**CHE 1011 Introduction to Chemistry I with Lab**

**ENG 1021 English Composition**

**MAT 1140 Career Mathematics**

**PSY 1001 General Psychology**

**COMMUNITY COLLEGE CREDIT HOURS**

**Total Credit Hours:** 26

Additional costs may apply. All books, kits & supply costs are estimated. Cost, information, and classes are subject to change. Statistics present are based on the US Bureau of Labor Statistics. This certificate is eligible for Financial Aid. You may begin the Financial Aid process by completing your Free Application for Federal Aid (FAFSA) at [www.FAFSA.ed.gov](http://www.FAFSA.ed.gov). If you have further questions, please call (303)344-4910.