

NORTH CAROLINA CAREER AND TECHNICAL EDUCATION 2010-2011 CREDENTIALING DATA

SAMPLE CREDENTIALS:

Adobe Certified Associate
American Welding Society
ASE Automotive Service Technician
Autodesk Certification
Career Readiness Certificate
Certified Electronic Technician
Certified Internet Webmaster
Certified Nursing Assistant I
Cisco Certified Network Associate
CompTIA A+ Essentials
Emergency Medical Technician
Microsoft Office Specialist
NCCER Core Certification
North Carolina Cosmetology License
OSHA 10
Pharmacy Technician Certification
ProStart Certification
ServSafe



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North Carolina

Career and Technical Education

2010-2011 Credentialing Data

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The Career and Technical Education Directory can be accessed at:
<http://www.ncpublicschools.org/cte/directory/>

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Industry Credentialing

Benefits of Student Credentialing

Credentialing Categories

Benefits of Student Credentialing

This report, North Carolina Career and Technical Education 2010-2011 Credentialing Data, offers an accounting of information collected from the administration of **27** different assessments in which students earned **24,782** credentials. The raw data is disaggregated by local education agency, region, state, and industry credential.

While the use and obtainment of credentials by high school students has numerous benefits, a prime outcome for educators is the ability to gage the level of understanding regarding specific skills and knowledge within a course of study and adjust instruction as needed to ensure student competence. Additional benefits include:

- **Career and Continuing Education Preparation**
High school students who have attained a credential have a documented skill set and are, therefore, more marketable in the employment arena and better prepared to succeed in a post-secondary environment. CTE has always excelled in its competency-based approach to teaching and instructional evaluation. CTE programs can enhance this system by providing students the opportunity to verify skills learned by passing external credential examinations. CTE credentialing offers students entry-level, stackable evidence of skill attainment that is relevant to careers and post-secondary education.
- **Workforce Development Component**
CTE programs are major contributors to a local education agency's reputation as a prime supplier of skilled entry-level workers for local communities as well as the state as a whole. Business and industry normally consider external credentialing a reliable "predictor of success" for entry-level employment. It is common for companies to use external testing to screen applicants for the interview process—only interviewing candidates that can score acceptably on a series of skill set tests that relate to their job application area.
- **Highly Qualified Teachers**
A discussion of the benefits of credentialing cannot exclude the need for teachers to become trained (certified) in an area aligned with the CTE programs they teach. Industry certification with related training expands a teacher's content background in the skill set areas and job roles for which they train students. It also enables them to better explain the requirements of specific jobs in related career.

Credentialing Categories

Of the **24,782** credentials earned by students in North Carolina Public Schools during the 2010-2011 school year, each belong in one of the following three categories: a completed industry certification program or a pathway examination that leads to a completed industry certification, a state-issued professional license, or a certificate.

- **Completed Industry Certification or Pathway Examination**

Certified Nursing Aide I and Microsoft Office Specialist are examples of “completed” industry certifications that can be earned before high school graduation. It should be noted that completed industry certifications may lead to entry-level jobs immediately after high school, usually when that certification validates most of the essential skills of a particular job (e.g., Nurse Aide I). Most industry credentials represent the validation of one or more “skill sets” which represent only a portion of a job.

Many credentialing programs offer “pathway” examinations (e.g., Automotive Service Excellence - ASE, A+, and CISCO) that lead to a completed industry certification in a particular area and/or skill level. Other certification entities may refer to their examinations as “complete” certifications (e.g., Microsoft Certified Professional, Microsoft Office Specialist), but acknowledge that these are “pathway” examinations that are part of a formal certification “track” (program) which requires multiple examinations for full program certification.

- **State-issued Professional License**

Licensures used for credentialing in secondary Career and Technical Education normally represent validation of the essential skills needed for a specific job as determined by a state licensing agency. Cosmetology licensure is an example. Many state issued licensures are beyond the scope of secondary-level coursework.

- **Certificate**

Certificate assessments gauge general skill attainment in a particular field/area, for example the WorkKeys™ Career Readiness Certificate. Certificate assessments are valuable tools in providing external evidence of knowledge.

Of note, while credentials are valuable to students as present or future employees and to employers, the rigor of credentials may vary greatly depending on the skill set assessed.



Selected Credentials Profiled

Automotive Service Excellence (ASE)

North Carolina Career Readiness Certificate

North Carolina Microsoft Information Technology
Academy

National Center for Construction Education Research
(NCCER)

Nurse Aide I

ServSafe Food Protection Manager Certification

Outlined below are selected credentials that students in North Carolina Public Schools earned during the 2010-2011 school year. These credentials were selected to provide explanations of some of the most common credentialing assessments earned, as well as to reveal the breadth of the students' accomplishments.



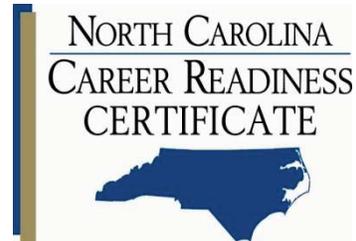
Automotive Service Excellence (ASE)

The Automotive Service Excellence (ASE) certification is administered by the independent, non-profit National Institute for Automotive Service Excellence (ASE). ASE tests and certifies the competence of individual automotive repair technicians to assure consumers and employers of their skills and knowledge. There are numerous reasons why North Carolina Career and Technical Education, Trade and industrial Education (T&I) students should obtain ASE credentials:

- Proven Experience, Skills, and Knowledge In order for technicians to become ASE certified they must pass a written examination and provide proof of two years of relevant work experience. There are 40-plus ASE national assessments. Prior to taking ASE exams, many technicians attend training classes or put in hours of study to prepare.
- Changing Technology Today's complex vehicles demand current technical knowledge. ASE requires technicians to re-test every five years to keep up with technology and to remain certified. All ASE credentials have expiration dates.
- Commitment to Quality Technicians who have invested the time and expense to earn ASE certification take pride in their work, and it shows in the service they provide. Shop owners and managers who encourage their employees to become certified maintain the same high standards in other aspects of their business.

Nationally, before high school programs are allowed to offer ASE credential opportunities to students, the program must achieve National Automotive Technicians Education Foundation (NATEF) accreditation. North Carolina began working towards NATEF accreditation for all its secondary programs in 1998. Currently, 104 of the 133 automotive technology programs in North Carolina are accredited.

North Carolina Automotive Service Technology students earned **56** ASE certifications during the 2010-2011 school year. These credentials were either in the area of brakes or electrical.



North Carolina Career Readiness Certificate

North Carolina's Career Readiness Certificate (CRC) is designed to meet the needs of both employers and job seekers in this transitioning economy. NC ranks as the 5th highest state in the nation for the number of CRCs issued.

The CRC is a portable skills credential that gives employers and career seekers an objective measure of key workplace skills. It certifies that a person has workplace skills that are transferrable between industry sectors, and across jobs within a sector. The CRC is issued at three levels: Bronze, Silver, and Gold.

In North Carolina the CRC is based on three WorkKeys™ assessments: Applied Mathematics, Locating Information, and Reading for Information.

- For employers, the CRC offers a reliable means of determining whether a potential employee has the necessary literacy, numeracy, and problem solving skills to be "job ready."
- For job seekers, the CRC serves as a portable credential that can be more meaningful to employers than a resume citing experience in a different job setting.

Below are statements from an employer and an economic developer regarding the North Carolina's CRC.

"Our vitality depends on a workforce that is able to adapt to change and operate in a manufacturing environment that thrives on lean leadership principles. It is more imperative than ever to make sure we're hiring the best candidates in the marketplace. The Career Readiness Certificate allows us to do just that."

Bernadette Young, Human Resources for Energizer Battery.

"It's one thing to offer the location, land, and buildings. But the major concern of companies coming into our area is whether there is a strong workforce within a

40-mile radius,” he said. “We consider the Career Readiness Certificate to be a work-ready program. This means that human resources people don’t have to investigate to see if someone is a good candidate for a job.” **Greg Cummings, Director, Economic Development, Robeson County Economic Development Commission**

North Carolina high school students were awarded **5,275** Career Readiness Certificates during the 2010-2011 school year.



North Carolina Public Schools Microsoft Information Technology Academy

North Carolina Public Schools is the first state educational agency in the country to enter into an agreement with Microsoft to pilot the statewide implementation of Microsoft Information Technology Academy (ITA) which provides students with real-world technology skills they need to be successful in college and a career and to earn industry certifications. North Carolina is the largest ITA in the world. The ITA also allows faculty to participate in professional development and earn industry credentials. The ITA consists of web-based modules and instruction, which allow students to learn Microsoft computer programs, such as Microsoft Word, Excel, PowerPoint and Access, at their own pace within the classroom and at home.

North Carolina high school students earned **8,944** certifications through the Microsoft ITA high schools during 2010-2011 school year. Catawba County certified the most students with **1,020** followed by Wayne County (**896**), Wilson County (**608**) and Johnston County (**607**). Spring Creek High School in Wayne County was the top ITA school in the state with **467** students certifying.

Of those students certifying, many have earned multiple certifications. Thirty-eight perfect scores were recorded on the certification exams throughout the state making them eligible for the Certiport Microsoft Office Specialist Worldwide Competition. Miranda Hill, a Spring Creek High School senior from Wayne County, qualified for the worldwide competition with a perfect score and fastest time amongst 72,000 other students across the United States. She competed in July and finished 7th in the world and was the 1st place US finisher.

“Earning certification and being a finalist is an incredible resume and confidence booster.” **Miranda Hill, Current UNC Pembroke Student**

Jennifer Tyndall, Miranda’s Spring Creek High School ITA teacher:

"Miranda has changed her major from Music Education to Management of Information Systems. The experience she has had with the Microsoft IT Academy over the past year, and her experience at the Certiport’s Worldwide Competition has prompted her to re-think her career goals."

Ms. Tyndall was named the “North America Teacher of the Year” by Certiport.



National Center for Construction Education Research (NCCER) CORE Credential

The National Center for Construction Education Research (NCCER) is a not-for-profit 501(c) (3) education foundation created in 1996 to develop standardized construction, maintenance, and pipeline curricula with portable credentials to help address the critical skilled workforce shortage that exists in construction. NCCER’s training process of accreditation, instructor certification, standardized curriculum, national registry, assessment, and certification is a key component in the industry’s workforce development efforts.

The North Carolina Career and Technical Education, Trade and Industrial Education Construction program area of NCDPI has formed a partnership with NCCER to provide teacher certification, program/facility certification, and student written and performance assessments, leading to portable credentials for students. NCCER national certifications for secondary and post-secondary construction programs are recognized as a national industry standard.

When a school program is NCCER certified, there are several accompanying requirements:

- Teachers must become certified as Craft Instructors by successfully completing the Instructor Certification Training Program (ICTP).
- Schools must also apply and become Accredited Training and Education Facilities (ATEF).

- Students must successfully complete both written and performance assessments as described in the Contra Curriculum for their respective area.

This past school year **6,501** North Carolina Career and Technical Education, Trade and Industrial Education Construction students earned the Core credential.



Nurse Aide I

North Carolina Health Science Education (HSE) offers Nurse Aide I training through qualified programs. In 1987, North Carolina Department of Public Instruction (NCDPI) signed a Memorandum of Understanding with the NC Division of Health Service Regulation, Center for Aide Regulation and Education that delegated management responsibility for public high school Nurse Aide I (NAI) training to the NCDPI. The National Nurse Aide Assessment Program (NNAAP) examination is the evaluation of nurse aide knowledge, skills, and abilities designed to determine minimal competence for the Nurse Aide I. Passage of the NNAAP exam is required to be listed on the Division of Health Service Regulation/NC NAI Registry.

During the 2010-2011 academic year **2,229** high school trained NAI students passed the written and skills examinations and subsequently were added to the NC NAI Registry. The Northwest CTE region produced **539** CNAs, the Western Region **502** CNAs, the Southwest Region **403** CNAs, and Central Region **401**. All other CNAs came from the remaining regions. Based on the number of students added to the NC NAI Registry, the four top nurse aide training schools are Career Academy and Technical School in Iredell County, **78** CNAs; Winston-Salem Forsyth Career Center, **52**; Lincoln School of Technology, **46**; and Cabarrus Health Science Academy, **41** CNAs.

Being listed on the NC NAI Registry benefits students in two ways. First, students who are listed on the NAI Registry are eligible for hire by the medical industry. NAIs may work in hospitals, long-term care facilities, hospices, doctors' offices, and a variety of other locations. Secondly, students who are applying to post-secondary allied health training programs have points added to their

application score for admission or they have the NAI prerequisite for admission completed.

North Carolina high school nurse aide training in Department of Defense Education Activity (DoDEA) American High Schools is the result of a partnership established between NCDPI, North Carolina Division of Health Service Regulation, PearsonVUE, Nurse Aide Competency Evaluation Service, and DoDEA. This partnership formed in response to American soldiers' desire for their dependents attending DoDEA high schools to receive the same opportunity for Nurse Aide I training and certification that stateside high school students have. In May 2011, 27 DoDEA high school students were listed as CNAs on the NC NAI Registry.

NC high school NAI training continues to adapt to help meet the current industry need for Direct Care Workers (DCW). In May 2009 the direct care workforce totaled 116,210. Between 2006 and 2016, NC will need 48,530 additional DCWs. Of this 43% increase, 86% are projected to be in the Personal and Home Care Aides and Home Health Aides categories. In response to the need, qualified high school students can now earn the Geriatric Aide Endorsement on the NAI Registry by successful completion of the new Fundamentals of Gerontology course. By the end of this academic year, it is predicted that a NC high school student will possess the very first Home Health Aide Endorsement to be listed on the NC NAI Registry. Successful completion of the new course, Public Health Fundamentals, prepares students for the Home Care Aide endorsement.

Below are comments from **Nicole Waters, Burns High School, Class of 1995**, who was listed on the NC Nurse Aide I Registry before leaving high school.

"I can tell you that I WOULD have been a high school dropout statistic had it not been for stepping into a CTE Health Occupations course. My high school Health Occupations course gave me the foundation and resources I needed to go to college that I would not have had otherwise. I have worked my way through all parts of nursing to where I am today and will be applying for admission into a Doctor of Nursing Practice (DNP) program February 2012. I have paid for all of my education without student loans! I THANK GOD every day that the state of North Carolina and the public education system offered this course (Allied Health Science II) for me and other students."

Nicole Waters became a Nurse Aide I while at Burns High School. Then, she became an LPN, RN, and has earned her Master's Degree. Nicole returned to Burns High School as a Health Science Education teacher and taught for five years the very same class she took as an adolescent. Now Nicole is a nursing instructor at Gardner-Webb University. Her professional fruit is plentiful and her deep roots go back to Career and Technical Education/Health Science Education/Nurse Aide I Training.



ServSafe Food Protection Manager Certification

ServSafe is a nationally recognized food safety and sanitation certification for the restaurant and hospitality industries. North Carolina Family and Consumer Sciences Education (FACS) students taking Foods II Advanced/Enterprise or Culinary Arts and Hospitality sequences of courses can sit for the ServSafe Manager Food Protection assessment. The textbook, ServSafe® Essentials, 5th Edition, is used in the classroom to help prepare students for the examination.

There are numerous reasons why North Carolina Career and Technical Education, FACS students should obtain the ServSafe credential:

- ServSafe training meets the needs of teenaged learners. It is engaging, for greater comprehension and better application.
- The ServSafe Manager Food Protection Certification is accredited by the American National Standards Institute (ANSI) Conference for Food Protection (CFP).
- The ServSafe Manager Food Protection Certification Exam is valid, reliable, and legally defensible.
- This is a certification the industry trusts. More than 3 million ServSafe Food Protection Manager Certifications have been awarded to date.
- Because ServSafe Certification meets the needs of today's diverse industry. Written examination booklets are offered in English, Spanish, Chinese, Korean, Japanese, French Canadian and large print. Online exams are offered in English, Spanish and Chinese.

This past year **1,069** North Carolina Career and Technical, Family and Consumer Sciences Education students acquired the ServSafe Manager Food Protection Certification.



NC CTE Credential Data 2010-2011

NC CTE State-wide Credential Data

NC CTE Regional Credential Data

NC CTE Central Region Credential Data

NC CTE Northeast Region Credential Data

NC CTE Northwest Region Credential Data

NC CTE Southeast Region Credential Data

NC CTE Southwest Region Credential Data

NC CTE Western Region Credential Data

North Carolina Career and Technical Education State-wide Credential 2010-2011 Data

Credential	Earned
AC Theory and DC Analog	4
ASE Brakes and Electrical	56
ASE Collision Repair and Refinish Certification	1
A*S*K Assessment of Skills and Knowledge	39
Career Readiness Certificate	5,275
CareerSafe 10 Hour OSHA	134
CISCO Certified CENT	1
CompTIA A+	13
CompTIA A+ Essentials	5
CphT Certified Pharmacy Technician	26
Emergency Medical Technician Certification	8
Microsoft Office Specialist	8,944
National Institute for Metalworking Skills Module Completions	15
NCCER Core Certification	6,501
North Carolina Child Development Lead Teacher Certification	140
North Carolina Cosmetologist License	30
North Carolina Community College Drafting Certificate	34
North Carolina Fire Fighter Module Completions	141
North Carolina Manufacturing Certificate	15
North Carolina Nurse Aide I Registry	2,229
North Carolina Nurse Aide II Registry	8
Professional Service Industry Welding Certification	37
ProStart Certificate of Achievement	18
ServSafe Manager Food Protection Certification	1,069
Welding SMAW 1G position	33
Welding SMAW 1G/GMAW IG positions	5
70-680 Configuring Microsoft Windows 7	1
TOTAL	24,782

North Carolina Career and Technical Education Regional Credential Data 2010-2011

CTE Region	Earned
Central	5,161
Northeast	1,904
Northwest	3,046
Southeast	8,471
Southwest	4,429
Western	1,771
TOTAL	24,782

North Carolina Career and Technical Education Regional Credential Data 2010-2011

Central Region	
Local Education Agency	Earned
Alamance-Burlington School System	388
Asheboro City Schools	44
Caswell County Schools	5
Chapel Hill – Carrboro Schools	18
Chatham County Schools	547
Durham Public Schools	126
Franklin County Schools	88
Granville County Schools	15
Guildford County Schools	546
Johnston County Schools	859
Nash-Rocky Mount Schools	437
Orange County Schools	102
Person County Schools	161
Randolph County Schools	614
Rockingham County Schools	38
Vance County Schools	54
Wake County Public School System	509
Warren County Schools	1
Wilson County Schools	609
TOTAL	5,161

North Carolina Career and Technical Education Regional Credential Data 2010-2011

Northeast Region	
Local Education Agency	Earned
Beaufort County Schools	935
Chowan County Schools	104
Currituck County Schools	84
Dare County Schools	147
Edgecombe County Public School	10
Gates County Public Schools	44
Halifax County Schools	49
Hertford County Public Schools	7
Northampton County Schools	1
Elizabeth City - Pasquotank County Schools	14
Perquimans County Schools	81
Pitt County Schools	406
Roanoke Rapids Graded School District	20
Washington County Schools	1
Weldon City Schools	1
TOTAL	1,904

North Carolina Career and Technical Education Regional Credential Data 2010-2011

Northwest Region	
Local Education Agency	Earned
Alleghany County Schools	6
Alexander County Schools	12
Ashe County Schools	8
Caldwell County Schools	77
Catawba County Schools	1,100
Davidson County Schools	169
Davie County Schools	165
Hickory City Schools	100
Elkin City Schools	70
Iredell-Statesville Schools	122
Lexington City Schools	51
Mooresville Graded School District	117
Mount Airy City Schools	11
Newton-Conover City Schools	85
Stokes County Schools	243
Surry County Schools	217
Thomasville City Schools	104
Watauga County Schools	127
Wilkes County Schools	98
Winston – Salem Forsyth County Schools	90
Yadkin County Schools	74
TOTAL	3,046

North Carolina Career and Technical Education Regional Credential Data 2010-2011

Southeast Region	
Local Education Agency	Earned
Bladen County Schools	335
Brunswick County Schools	224
Carteret County Public School System	348
Clinton City Schools	6
Columbus County Schools	101
Craven County Schools	302
Cumberland County Schools	361
Duplin County Schools	475
Greene County School System	5
Harnett County Schools	87
Jones County Public Schools	9
Lenoir County Public Schools	229
New Hanover County Schools	196
Onslow County Schools	3,266
Pamlico County Schools	158
Pender County Schools	154
Sampson County Schools	203
Wayne County Public Schools	2,007
Whiteville City Schools	5
TOTAL	8,471

North Carolina Career and Technical Education Regional Credential Data 2010-2011

Southwest Region	
Local Education Agency	Earned
Anson County Schools	65
Cabarrus County Schools	472
Charlotte-Mecklenburg Schools	7
Cleveland County Schools	425
Gaston County Schools	386
Hoke County Schools	321
Kannapolis City Schools	85
Lee County Schools	147
Lincoln County Schools	418
Montgomery County Schools	96
Moore County Schools	92
Public Schools of Robeson County Schools	1,045
Richmond County Schools	146
Rowan-Salisbury Schools	229
Scotland County Schools	33
Stanly County Schools	267
Union County Public Schools	195
TOTAL	4,429

North Carolina Career and Technical Education Regional Credential Data 2010-2011

Western Region	
Local Education Agency	Earned
Asheville City Schools	12
Buncombe County Schools	325
Burke County Schools	62
Cherokee County Schools	212
Clay County Schools	18
Graham County Schools	8
Haywood County Schools	61
Henderson County Public Schools	356
Jackson County Public Schools	70
Macon County Schools	28
Madison County Public Schools	76
McDowell County Schools	31
Mitchell County Schools	212
Polk County Schools	19
Rutherford County Schools	68
Swain County Schools	41
Transylvania County Schools	61
Yancey County Schools	111
TOTAL	1,771