

**2012 IE REPORT TRANSMITTAL FORM**

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The information included in the attached reports is current and correct to the best of my knowledge.

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**Date approved by Board of Trustees or Area Commission:**

Clemson University Board of Trustees  
January 26, 2001.

**Date approved by Commission on Higher Education:**

2001

**Institutional web address of  
Summary Report:**

<http://www.clemson.edu/administration/index.html>

**Institutional web address of Title II Report:  
(Four-year institutions only)**

<http://www.clemson.edu/hehd/departments/education/about/titleII.html>

Check list of IE Reports due **August 1, 2012**

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Professional Examinations Table

**Date Submitted:**

August 1, 2012

**CLEMSON UNIVERSITY**

**SUMMARY REPORT  
ON  
INSTITUTIONAL EFFECTIVENESS**

**SUBMITTED TO  
THE SOUTH CAROLINA COMMISSION ON HIGHER EDUCATION**

**AUGUST 2012**

INSTITUTION:

**Clemson University – 2012 Annual IE Report**

*Results of Professional Examinations*

**APPLICABLE TO ALL SECTORS – REPORTED FOR APRIL 1, 2011- MARCH 31, 2012**

According to Section 59-101-350, the Commission is responsible for collecting “student scores on professional examinations with detailed information on state and national means, passing scores, and pass rates, as available, and with information on such scores over time, and the number of students taking each exam” from four- and two-year institutions to be included in the annual report to the General Assembly. The Commission on Higher Education also uses this information as the primary source with which to fulfill requirements in Section 59-103-30 for performance funding to collect information on Instructional Quality and Graduates’ Achievements by looking at the scores of graduates on post-undergraduate professional, graduate, or employment-related examinations and certification tests.

Past committee work and the development of performance funding have defined the collection of this information to include only first-time test takers (except the teacher education exams at four-year institutions, which include all test takers) for those students who completed an examination during the period of **April 1, 2011 through March 31, 2012**. The following tables display the exams that each sector has reported in the past. Please use this list as a guide for the exams you report this year on the table provided. **Please be aware that your institution may have students taking certification exams that have not been reported on in the past.** This would be the case if students were just beginning to complete a new program. In such cases, please report the scores and indicate that the exam is new to the table. New exams will not be used for Performance funding reporting.

***THE COMMISSION WILL REQUEST NATIONAL AND STATE PASS RATES AND ANY ADDITIONAL INFORMATION FOR THESE EXAMINATIONS, AS IT IS AVAILABLE, FROM NATIONAL AND STATE AGENCIES TO BE USED IN THE REPORT TO THE GENERAL ASSEMBLY. THESE NATIONAL AND STATE AGENCIES CAN BE FOUND IN “A CLOSER LOOK.”***

## **Construction Science and Management: Constructor Certification Level 1**

Clemson University's Bachelor of Science in construction science and management was established in 1962 and is accredited by the American Council for Construction Education. Below are the pass rates for the American Institute of Constructors Constructor Certification Level I examination for the past five years:

### **Certification of Construction Science Graduates**

<b>Year</b>	<b>Pass Rate</b>
2005	58%
2006	60%
2007	75%
2008	80%
2009	77%
2010	65%
2011	79%

As the table demonstrates, after making a significant and steady improvement over the previous four years, the pass rate began to fall in 2009. In 2010 the pass rate dropped to 65% (the national average is 63%). Due to the substantial change in pass rates over the past several years, the faculty met to determine the cause and attempt to rectify the problem. The faculty found that one of the reasons for the decline in pass rates was that the students were not receiving instruction in one of the key areas assessed by the exam until after they took the exam. We have made changes to teach this material earlier and have seen a significant improvement in 2011 pass rates.

### **Nursing: NCLEX Examination**

Clemson University School of Nursing NCLEX pass rate for 2011 is 91.23% (97.37% for the first quarter of 2012). The pass rate rose for 2011 after a slight dip the previous year associated with the rescoring of the national test to increase the difficulty associated with the increasing complexity of health care. This testing period also includes several students who graduated twelve to eighteen months prior to taking the exam for the first time. We will carefully review these results to determine if other factors were involved in the slight decrease in scores. We are continuing with a number of strategies that have led to increased success over the past four years. Faculty members continue to carefully review the curriculum to identify and eliminate any areas of omission or excessive redundancy and to coordinate content among courses in each semester to facilitate student application and long-term learning. Clinical hours were increased three years ago which has had overall positive outcomes. The Kaplan comprehensive testing program has been well received and will be examined to determine if the initially unsuccessful students could have been identified for additional remediation prior to testing. Students will continue to take subject area exams online in addition to teacher made exams each of the last four semesters and those who do not exceed the national pass rate for the exam are required to remediate the content and retest. We continue to have a large number of students who report taking only the minimum 75

questions. The identification and elimination of learning gaps in each area strengthens preparation as nursing professionals as well. The Clemson University undergraduate nursing program maintains close to a 100 percent job placement rate.

### National Council Licensure Exam (NCLEX) 2008-2012

Name of Exam	Year	# of 1 <sup>st</sup> Time Examinees	# of 1 <sup>st</sup> Time Examinees who Passed	% 1 <sup>st</sup> Time Examinees Passing
National Council Licensure Exam (NCLEX) - Registered Nurse (BS)				
Clemson University	2008	104	94	90.38%
South Carolina NCLEX Pass Rate	2008	1911	1669	87.34%
National NCLEX Pass Rate	2008	129114	111979	86.73%
Clemson University	2009	103	98	95.15%
South Carolina NCLEX Pass Rate	2009	2158	1907	88.37
National NCLEX Pass Rate	2009	134728	119131	88.42
Clemson University	2010	107	96	89.72
South Carolina NCLEX Pass Rate*	2010	2197	1967	89.53
National NCLEX Pass Rate**	2010	140883	123158	87.42
Clemson University	2011	114	104	91.23

<b>Name of Exam</b>	<b>Year</b>	<b># of 1<sup>st</sup> Time Examinees</b>	<b># of 1<sup>st</sup> Time Examinees who Passed</b>	<b>% 1<sup>st</sup> Time Examinees Passing</b>
South Carolina NCLEX Pass Rate*	2011	2215	1986	89.66
National NCLEX Pass Rate**	2011	144565	127074	87.90
<small>1<sup>st</sup> quarter 01/01/2012-03/31/12</small> Clemson University	2012	38	37	97.37
South Carolina NCLEX Pass Rate*	2012	563	523	92.90
National NCLEX Pass Rate**	2012	37353	34079	91.23

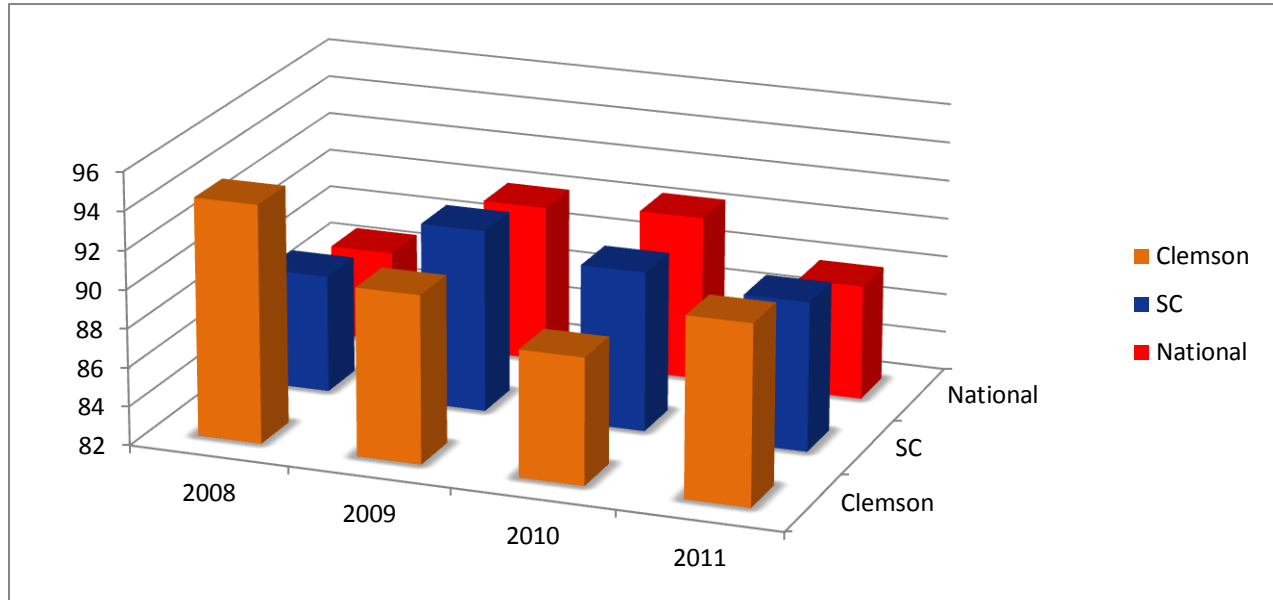
\*Source: South Carolina Board of Nursing:

<http://www.llr.state.sc.us/pol/nursing/forms/NCLEXRNPassRate.pdf>

\*\*Source: National Council of State Boards of Nursing:

[https://www.ncsbn.org/Table\\_of\\_Pass\\_Rates\\_2011.pdf](https://www.ncsbn.org/Table_of_Pass_Rates_2011.pdf)

## Clemson, South Carolina, and National NCLEX Pass Rates



Overall first time pass rate for the undergraduate students rose to 91.23 % after a slight dip in 2010. This exceeds the national pass rate of 87.42% in 2011

### **Accounting: CPA Examination**

Since 1989 the School of Accountancy and Legal Studies has held AACSB Accounting Accreditation for its undergraduate and graduate programs. AACSB International is the premier accrediting agency for management education and the only grantor of accounting accreditation.

South Carolina requires at least 1 year of accounting experience under the direct supervision and review of a CPA or Public Accountant who is licensed to practice in some state or territory of the United States, or the District of Columbia to sit for the CPA Examination and be licensed to practice. The faculty at Clemson believes the best preparation to sit for the CPA Examination is to wait until a master of accountancy degree program is completed. Clemson has a coordinated undergraduate/graduate program that will meet the 150-hour requirement to be licensed as a CPA. This program of study provides excellent preparation for the CPA Examination, as well as, a career in accounting. The Master of Professional Accountancy (MPAcc) program added to the undergraduate program exceeds the 150-hour requirement for licensure and allows the student to specialize in either assurance and management services or taxation.

## **School of Education: PRAXIS Examinations**

State certification is required for initial level teacher certification program candidates to be practicing teachers in SC. Candidates must pass the PRAXIS I before being admitted to professional level (junior-senior year) of our programs. Then candidates must take and pass PRAXIS II Principles of Learning and Teaching (PLT) and subject area test(s) for state certification. Clemson University's [Eugene T. Moore School of Education](#) submits Title II Reports with PRAXIS II licensure test pass rates annually. 2010-11 Title II report was complete in April 2012. Clemson has opted to present this official report on 2010-11 program completers rather than provide a best estimate on the current year as has been submitted previously.

Educational leadership, school counseling and literacy education advanced level programs require passes for PRAXIS II subject area tests for certification and practice as school counselors, school leaders, and literacy specialists. Pass rates for all three are 100%. These tests are not included in the table below.

### **PRAXIS II Examination Pass Rates: Initial Teacher Certification Program Completers 2010-11<sup>1</sup>**

<b>Name of Exam</b>	<b>Date(s) Administered</b>	<b># of Examinees</b>	<b># of Examinees who Passed</b>	<b>% Examinees Passing</b>
<i>Teaching and Research Sectors</i>				
<b><i>PRAXIS SERIES II: PRINCIPLES OF LEARNING &amp; TEACHING (K-6)</i></b>	Bi-monthly	<b>112</b>	<b>110</b>	<b>98%</b>
<b><i>PRAXIS SERIES II: PRINCIPLES OF LEARNING &amp; TEACHING (5-9)</i></b>	Bi-monthly	<b>34</b>	<b>31</b>	<b>91%</b>
<b><i>PRAXIS SERIES II: PRINCIPLES OF LEARNING &amp; TEACHING (7-12)</i></b>	Bi-monthly	<b>67</b>	<b>60</b>	<b>90%</b>
<b><i>PRAXIS SERIES II: SPECIALTY AREA TESTS</i></b>	Bi-monthly	<b>213</b>	<b>194</b>	<b>91%</b>

<sup>1</sup>TITLE II HEA Report, April 2012.

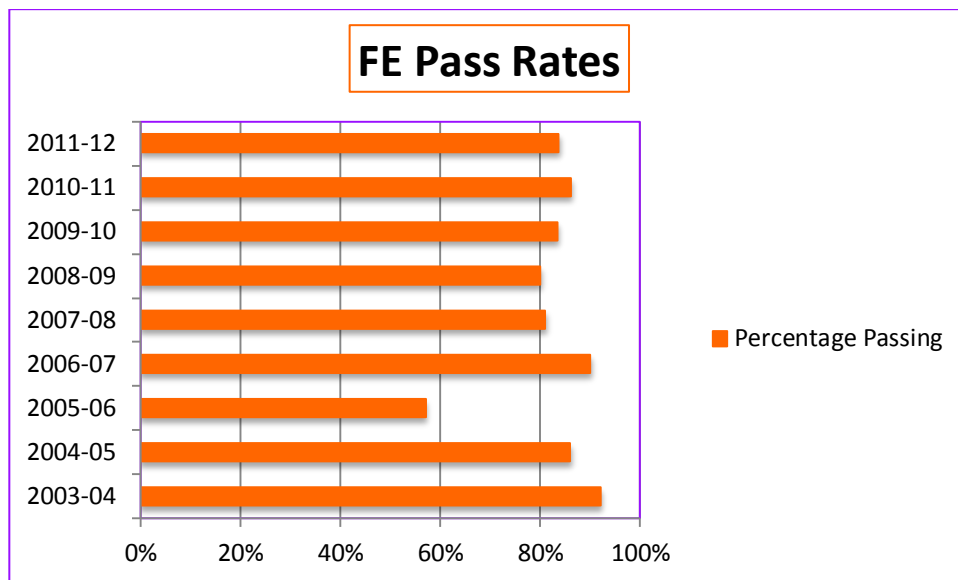
## **Engineering: Fundamentals of Engineering Examination**

All seniors in the engineering programs at Clemson University are encouraged to take the Fundamentals of Engineering (FE) examination. The programs involved are: Bioengineering, Biosystems Engineering, Chemical and Biomolecular Engineering, Civil Engineering, Electrical and Computer Engineering, General Engineering, Industrial Engineering, Materials Science and Engineering, and Mechanical Engineering. The FE pass rates for all engineering programs for 2003-2011 are given below:



## Fundamentals of Engineering Examination Results

Academic Year	Percentage Passing
03-04	92%
04-05	86%
05-06	57%
06-07	90%
07-08	81%
08-09	80%
09-10	83.4%
10-11	86.1%
11-12	83.7%



## **Health Science, Health Promotion and Education: CHES Examination**

The Health Promotion and Education Concentration within the Department of Public Health Sciences program was designed to provide students with the competencies of the Certified Health Education Specialist (CHES). Participation in the national CHES exam is optional. The National Commission for Health Education Credentialing recently announced that Clemson University was among the top 10 schools with the most students taking the CHES exam in 2007. For the past 10 years, 100 percent of DPHS students have scored above the national average. The table below gives the most recent CHES Examination results.

<b>Clemson University: April 2011-October 2011</b>									
	Assess Needs	Plan Programs	Implement Programs	Evaluate Programs	Administer Programs	Act as a Resource	Communicate /Advocate	Total Score	Percent Passed
Cohort National Average Scores	12.48	15.29	25.94	14.06	11.72	16.99	7.57	104.04	75.31%
Clemson Average Scores	12	16.25	28.75	14.75	13.25	17.25	9.25	111.5	100%

## **Food Science and Human Nutrition**

To become a Registered Dietitian, students must complete an accredited dietetics undergraduate program and then secure an accredited dietetic internship. Applying and securing a dietetic internship is competitive and the process is completed through computerized matching. For the 2011-2012 academic year, Clemson had 37 graduates apply for a dietetic internship and 15 were accepted resulting in a 41% computer matching rate. The national computer matching rate for dietetic internship applicants for 2011-2012 was 50%. Clemson's 5-year match rate (Fall 2007 to spring 2012) was 43% and the national computer-matching rate from that time period ranged from 50-55%.

The Commission on Dietetic Registration tracks the percentage of Clemson graduates who pass the national registration examination for dietitians. In the 2011 calendar year, Clemson had 7 students take the exam for the first time and all 7 passed resulting in a 100% pass rate. Over a 5-year period (2007-2011) 95% of the graduates who took the Registration Examination for Dietitians passed on the first attempt. Scores for Clemson graduates during that time period were higher than the national first-time takers for the total scaled score, and for both the scaled sub-scores in food and nutrition and in foodservice systems and management.

## **Architecture: Architect Registration Examination (ARE)**

The Architect Registration Examination (ARE) administered by the National Council of Architecture Accrediting Boards (NCARB) tests candidates on their knowledge, skills, and abilities in various aspects of the practice of architecture. The content of the ARE examination relates to actual situations that an architect will encounter in practice. The ARE treats the practice of architecture as an integrated whole measuring not just knowledge areas but also critical thinking and judgment. The most recent results available, for the 2010 administration,

are in the table below. As may be seen, Clemson graduates outperform the national average in most areas of the test.

	Programming, Planning & Practice	Site Planning & Design	Building Design and Construction Systems	Schematic Design	Structural Systems	Building Systems	Construction Documents and Services
Clemson	67%	86%	63%	78%	72%	80%	61%
U.S.	62%	76%	63%	74%	66%	65%	63%

### **Graduate Record Examination (GRE)**

The Graduate Record Examination is not a professional licensure examination but it provides insight into the general performance of students who select to take the examination and report that they are graduates of Clemson University. Undergraduate or graduate students may take the examination and it may be taken multiple times. This measure of student development cannot be considered either graduate or undergraduate but provides a comparison overview among the disciplines.

#### **Clemson Graduates Graduate Record Examination Results 2010-2011**

<b>Discipline</b>	<b>Sample Size</b>	<b>Verbal Mean Score (range)</b>	<b>Quantitative Mean Score (range)</b>	<b>Writing Mean Score (range)</b>
Animal Science	84	439 (300-640)	563 (420-770)	4.93 (2.0-5.4)6.22
Architecture	61	473 (320-740)	617 (440-800)	3.8 (2.0-5.5)
Biological Sciences	72	460 (320-590)	619 (440-750)	3.9 (3.0-5.0)
Biomedical Engineering	67	474 (310-660)	701 (540-800)	3.85 (3.0-5.0)
Business	16	437 (280-630)	620 (570-700)	3.92 (2.5-4.0)
Chemical Engineering	17	463 (280-700)	695 (590-800)	3.65 (2.0-6.0)
Civil Engineering	35	420 (260-700)	687 (490-800)	3.45 (2.0-5.0)
Computer Science	17	542 (310-770)	721 (520-800)	4.1 (2.5-6.0)
Early Childhood Education	20	435 (310-600)	502 (320-660)	3.9 (2.0-5.0)
English	10	596 (490-730)	507 (320-780)	4.10 (4.0-5.0)
Food Science	25	475 (320-650)	603 (280-740)	3.74 (3.0-5.0)

Forest Resources	9	538 (430-610)	540 (400-700)	3.78 (3.0-5.0)
Genetics	18	516 (410-690)	676 (510-800)	4.31 (3.0-6.0)
Health Professions	17	438 (310-550)	573 (520-750)	4.23 (2.5-5.0)
History	19	500 (400-710)	556 (420-750)	3.97 (3.0-6.0)
Industrial Engineering	17	464 (360-590)	670 (440-770)	4.00 (3.0-6.0)
Mathematical Sciences	18	496 (380-730)	731 (630-800)	3.85 (3.0-5.0)
Mechanical Engineering	44	474 (310-680)	725 (630-800)	3.61 (2.0-5.0)
Nursing	49	436 (270-630)	490 (260-760)	3.77 (2.5-4.0)
Parks, Recreation, and Tourism Management	15	414 (270-650)	448 (310-740)	3.86 (3.0-4.0)
Physics	14	583 (500-670)	747 (640-800)	4.23 (4.0-5.0)
Psychology	80	448 (320-630)	581 (350-740)	4.03 (3.0-5.5)
Public Health	45	478 (330-680)	591 (430-740)	3.95 (3.0-5.5)
Secondary Education	20	493 (360-620)	598 (370-800)	4.0 (3.0-4.5)
Sociology	16	446 (310-570)	489 (340-650)	3.75 (2.0-5.0)



## **Program-Specific Accreditation**

Program-specific accreditations are a reliable indicator of the quality of particular academic programs. In addition to institutional accreditation through SACS/COC, academic programs may be accredited through program-specific accrediting bodies. The following table lists accredited programs at Clemson University in academic year 2011-2012.

<b>Accrediting Body and Degree Program</b>	<b>Accreditable Program</b>	<b>Fully-Accredited Program</b>	<b>Last Accreditation</b>	<b>Next Accreditation</b>
<b>American Assembly of Collegiate Schools of Business - International Association for Management Education</b>				
Baccalaureate, Master's and Doctoral degree programs in business administration and management	X	X	2010	2015
Baccalaureate, Master's and Doctoral degree programs in accounting	X	X	2010	2015
<b>Accrediting Board for Engineering and Technology, Inc.</b>				
Engineering (ENG) - Baccalaureate programs in engineering	X	X	2006	2012
Master's programs in engineering				
Computer Science (COMP)- Baccalaureate programs in computer science	X	X	2006	2012
<b>American Council for Construction Education</b>				
Construction Education (CONST) - Baccalaureate degree programs	X	X	2007	2013

<b>American Society of Landscape Architects</b>				
Landscape Architecture (LSAR)- Baccalaureate and master's programs leading to the first professional degree	X	X	2009	2015
<b>Commission on Accreditation for Dietetics Education (CADE)</b>				
Nutrition and Dietetics – Baccalaureate program	X	X	2007	2017
<b>Commission on Collegiate Nursing Education (CCNE)</b>				
Baccalaureate degree in nursing education programs	X	X	2010	2020
Graduate degree nursing education programs	X	X	2010	2020
<b>Council for Accreditation of Counseling and Related Education Programs (CACREP)</b>				
Master's degree programs to prepare individuals for community counseling, mental health counseling, marriage and family counseling, school counseling, student affairs practice in higher education	X	X	2000	2015
<b>National Architectural Accrediting Board, Inc.</b>				
Architecture (ARCH) - first professional degree programs	X	X	2008	2011

<b>National Association of Schools of Arts and Design</b>				
Art & Design (ART) - Degree-granting schools and departments and non-degree-granting schools	X	X	2007	2012
<b>National Council for Accreditation of Teacher Education (NCATE)</b>				
Baccalaureate and graduate programs for the preparation of teachers and other professional personnel for elementary and secondary schools	X	X	2005	2013
<b>National Recreation and Park Association</b>				
Parks, Recreation, and Tourism Management - undergraduate and graduate programs	X	X	2010	2015
<b>Planning Accreditation Board</b>				
Master of City and Regional Planning (MRCP)	X	X	2008	2015
<b>Society of American Foresters</b>				
Forestry (FOR) programs leading to a bachelor's degree or higher first professional degree	X	X	2002	2012*
* May be rescheduled to 2013				