## Request for Authorization to Establish a Bachelor of Science in Engineering at Western Carolina University

Western Carolina University requests authorization to establish a B.S. in Engineering degree program (CIP 14.0101).

# **Program Description**

Western Carolina University requests Authorization to Establish a Bachelor of Science in Engineering (BSE) degree. The Engineering Accreditation Commission of the Accreditation Board for Engineering (EAC of ABET) currently accredits 34 BSE degree programs nationwide. Bachelor of Science in Engineering programs differ from discipline specific degree programs (e.g., BS in Electrical Engineering) in that they provide specialization through domain concentrations built upon common math/sciences components and engineering curriculum cores. Establishing the BSE program would create a process of efficient and agile modification of the curriculum as needed to address institutional priorities and regional needs. Also, by creating a common core curriculum, the BSE would minimize unnecessary duplication and encourage sharing of expensive facilities such as the Center for Rapid Product Realization (CRPR). The proposed BSE is built upon a strong "applications engineering" focus emphasizing project-based learning and collaborative/teamwork skills. The proposed 127 semester credit hour curriculum is comprised of 42 hours of liberal studies, 19 hours of an engineering core, a 32 hour math/sciences component, and an electrical engineering concentration of 34 hours.

Western Carolina University currently offers a B.S. in Electrical Engineering degree program in conjunction with UNCC. Since Fall 2011, WCU has been offering all of the coursework for this program, and the EAC of ABET recently accredited WCU's B.S.E.E. program. WCU's plan is to discontinue the BSEE degree and end the joint agreement with UNCC once the BSE obtains EAC of ABET accreditation.

# **Relevance to Institutional Mission and Strategic Plan**

Western Carolina University's Strategic Plan describes strategic directions and goals for the University to respond to regional needs and opportunities that are directly addressed by the proposed B.S. in Engineering program:

- Develop and support academic programs that respond to changing economic opportunities, technologies, and demographic trends.
- Develop programs that involve the students, faculty and the community in promoting regional development.

# Highlights from UNC-GA Data Template

Two UNC institutions offer the BSE degree program (ECU and NCSU). Also, NCSU offers the BSE with a concentration in Mechatronics on campus and in a joint program with UNC Asheville. In the past three years, Western Carolina University has established one baccalaureate and one doctoral program, and has discontinued twelve baccalaureate and four master's programs.

## **Outcome of Consultation with Disciplinary Panel**

The panel included faculty members from ECU, NCA&T, and UNCC in addition to the WCU faculty presenters. Discussion was held on the overall curriculum of the program and in particular on the relationship of the Core and Concentration components. There was consensus on the desirability of offering this program at WCU.

## **Student Demand**

The chart below contains WCU's four-year projection of student enrollment for the proposed BSE. Since the BSE with an Electrical Engineering concentration is unique within UNC, there is no prior information regarding student demand for this program. First year projected enrollment is based on assuming 10 graduates over a four year period with a four year success rate of 35%, which is typical in Engineering programs nation-wide.

|           | Year 1    | Year 2            | Year 3            | Year 4             |
|-----------|-----------|-------------------|-------------------|--------------------|
|           | (2012-13) | ( <u>2013-14)</u> | ( <u>2014-15)</u> | ( <u>2015-16</u> ) |
| Freshmen  | 30        | 30                | 30                | 30                 |
| Sophomore |           | 20                | 20                | 20                 |
| Junior    |           |                   | 15                | 15                 |
| Senior    |           |                   |                   | 10                 |
| TOTALS    | 30        | 50                | 65                | 75                 |

WCU thus projects enrollment of the program in its fourth year will be 25 full-time upper division students.

## **Opportunities for Graduates of the Program**

The proposal states that, according to information published by the Bureau of Labor Statistics of the U.S. Department of Labor, the size of the civilian work force will increase from 2004-14 by 14.7 million, or 10%, to 162.1 million. Bureau of Labor Statistics data also reveal the importance of providing engineering and related occupational training: "Employment in professional, scientific, and technical services will grow by 28.4 percent and add 1.9 million new jobs by 2014". According to the National Association of Colleges and Employers (NACE) in their *Jobs Outlook 2008*, the "highest demand [by employers for new graduates] is for engineering and accounting majors..."

## **Resource Implications**

**Resource needs:** Because the proposed program is based on the existing curricula in the B.S.E.E. program that Western has been offering on campus, no additional faculty positions, courses, library resources, equipment, or physical facilities are needed to implement this new program.

**Resources allocated:** The BSE degree program, as proposed, will be housed in WCU's Kimmel School, which will absorb responsibilities for administering the program.

**Estimated cost to the State:** Based on the University funding formula, in the fourth year, WCU would generate additional state appropriations of approximately \$130,000 if fully funded by the General Assembly.

## **Recommendation**

It is recommended that the Board of Governors approve Western Carolina University's request to establish a B.S. in Engineering degree program (CIP 14.0101).

## Degree Area and Level:

B.S. in Engineering (CIP 14.0101) at Western Carolina University

## Addressing UNC Tomorrow:

This proposed program would address several Recommendations within the UNC Tomorrow Report including the components to enhance Our Communities and Their Economic Transformation (Recommendation 4.4) and Our University's Outreach and Engagement (Recommendation 4.7).

## Role of Program in Relation to State and Regional Needs:

According to the proposal, "WCU is committed to regional stewardship and engagement. A core component of the stewardship model requires WCU to assist the region in developing a strong, diverse, sustainable, and vibrant economy. The BSE is a core component of the curriculum required to respond to changing regional needs. WCU already has invested millions of dollars in creating the Kimmel School for the specific purpose of developing outreach-based curricula. The BSE will be a very significant component of the School's curricula and it is critical to WCU supporting the region's business and industry."

## US Labor Department Analysis:

Summary – Overall engineering employment is expected to grow by 11 percent over the 2006-16 decade, about as fast as the average for all occupations. Engineers have traditionally been concentrated in slower growing or declining manufacturing industries, in which they will continue to be needed to design, build, test, and improve manufactured products. However, increasing employment of engineers in faster growing service industries should generate most of the employment growth. Job outlook varies by engineering specialty.
Source: <a href="http://www.occsupplydemand.org/OSD\_UnitOfAnalysis.aspx?CLUSCODE=024A-05&ST=NC&PathNo=1">http://www.occsupplydemand.org/OSD\_UnitOfAnalysis.aspx?CLUSCODE=024A-05&ST=NC&PathNo=1</a>

## Availability of Program Statewide (Enrollment and Degrees Awarded in Last 3 Years):

 Public universities – NCA&T received approval in January 2006 to offer the BS in Interdisciplinary General Engineering. There is not any enrollment or graduation data available for this degree program.

| Upp  | er Division Enrollment | t  |         |        | Aca     | ndemic Y | ear     |        |         |
|------|------------------------|----|---------|--------|---------|----------|---------|--------|---------|
|      |                        |    | Fall 07 | Spr 08 | Fall 08 | Spr 09   | Fall 09 | Spr 10 | Fall 10 |
| ECU  | Engineering, General   | BS | 49      | 60     | 61      | 68       | 89      | 99     | 104     |
| NCSU | Engineering, General   | BS | 153     | 185    | 170     | 228      | 15      | 14     | 7       |
| UNCA | Engineering, General   | BS | N/A     | N/A    | 10      | 9        | 17      | 20     | 17      |

| Nu   | Number of Degrees Awarded |    |               | ademic Ye     | ear           |
|------|---------------------------|----|---------------|---------------|---------------|
|      |                           |    | 2007-<br>2008 | 2008-<br>2009 | 2009-<br>2010 |
| ECU  | Engineering, General      | BS | 22            | 19            | 13            |
| NCSU | Engineering, General      | BS | 8             | 6             | 10            |
| UNCA | Engineering, General      | BS | N/A           | 3             | 5             |

- Private universities – N/A

*Available in Online or Distance Format from UNC institutions:* According to the Distance Education Inventory, NCSU is approved to offer the BS in Engineering in Craven County.

Available from Academic Common Market: North Carolina does not participate in the ACM at the undergraduate level.

WCU Campus enrollment and degrees awarded in similar programs at the Bachelors level: (Based on two CIP digits –14 CIP is the summary group for Engineering under which Engineering is listed as a program.)

| Upper Division Enrollment |   |      |      | _   | Aca  | demic Y | ear  | _   |      |
|---------------------------|---|------|------|-----|------|---------|------|-----|------|
|                           |   |      | Fall | Spr | Fall | Spr     | Fall | Spr | Fall |
|                           |   |      | 07   | 08  | 08   | 09      | 09   | 10  | 10   |
| WCU                       | Electrical and Electronics<br>Engineering | BSEE | 22   | 26  | 21   | 22      | 14   | 19  | 22   |

| Number of Degrees Awarded |  |      | I         | Academic Year | r         |
|---------------------------|--|------|-----------|---------------|-----------|
|                           |  |      | 2007-2008 | 2008-2009     | 2009-2010 |
| WCU                       | Electrical and Electronics Engineering | BSEE | 3         | 10            | 8         |

# Campus Average of enrollment and degrees awarded per degree program in this area at the Bachelors level over the last 3 Academic Years, Fall 2007-Fall 2010:

(Based on two CIP digits –14 CIP is the summary group for Engineering under which Engineering is listed as a program.)

|       | Campus Average           |                |          |  |  |  |  |  |  |  |
|-------|--------------------------|----------------|----------|--|--|--|--|--|--|--|
|       | Number of Upper Division |                |          |  |  |  |  |  |  |  |
|       | Active                   | Enrollment per | per Year |  |  |  |  |  |  |  |
|       | Programs                 | Semester       |          |  |  |  |  |  |  |  |
| ECU   | 1                        | 76             | 18       |  |  |  |  |  |  |  |
| NCA&T | 10                       | 56             | 16       |  |  |  |  |  |  |  |
| NCSU  | 15                       | 209            | 70       |  |  |  |  |  |  |  |
| UNCA  | 1                        | 15             | 4        |  |  |  |  |  |  |  |
| UNCC  | 5                        | 160            | 59       |  |  |  |  |  |  |  |
| WCU   | 1                        | 21             | 7        |  |  |  |  |  |  |  |
| Car   | Campus Average: 90 29    |                |          |  |  |  |  |  |  |  |

WCU Campus Degree Programs added in the past three years:

- Bachelor
  - BA International Studies (04/09/2010)
- Master
  - N/A
- Doctoral
  - DPT Doctor of Physical Therapy (04/09/2010)

## WCU Campus Degree Programs discontinued in the past three years:

- Bachelor
  - BS Education in French, Secondary Education (03/20/2009)
  - BS Education in German, Secondary Education (03/20/2009)
  - BS Electrical and Computer Engineering technology (03/20/2009)
  - BS Telecommunications Engineering Technology (03/20/2009)
  - BS Industrial Distribution (03/20/2009)
  - BS Engineering Technologies Manufacturing (03/20/2009)
  - BS Industrial Chemistry (03/20/2009)
  - BS Social Science (03/20/2009)
  - BA Social Sciences (03/20/2009)
  - BS International Business (03/20/2009)
  - BS Clinical Laboratory Sciences (02/11/2011)
  - BA Chemistry (08/12/2011)
- Master
  - Master of Education in English, 2-Yr College Teaching (03/20/2009)
  - Master of Education in Mathematics, 2-Yr College Teaching (03/20/2009)
  - Master of Education in Physical Education, 2-Yr College Teaching (03/20/2009)
  - Master of Education in Biology, 2-Yr College Teaching (03/20/2009)
- Doctoral
  - N/A

## **Request for Authorization to Establish a Bachelor of Science in Professional Studies at Fayetteville State University**

Fayetteville State University requests authorization to establish a B.S. in Professional Studies degree program (CIP 24.0101).

# **Program Description**

The proposed Bachelor of Science in Professional Studies (B.S.P.S) is an interdisciplinary degree program enabling students to develop 2lst century skills (such as critical thinking and knowledge of global cultures) that will prepare them for professional success in the global economy. At the same time, the program provides students the opportunity to develop an individualized program of specialized knowledge and skills consistent with their personal interests, professional goals, and previous experience. The 123-hour B.S.P.S. is designed to provide a pathway for degree completion for various groups of students who have previously earned a significant amount of college credit, such as adult learners and military personnel. One distinctive feature of the program is that all students will develop a set of professional skills by completing courses in logic, ethics, statistics, two courses in global cultures, and a capstone course in leadership and communication. The curriculum is comprised of general education (45 hours), the professional core courses mentioned above (21 hours), an advisor- and faculty committee-approved major concentration (42 hours), and 15 hours of upper division electives. The B.S.P.S. will enhance FSU's service to military personnel and their dependents, many of whom seek to attend an institution in close proximity to Fort Bragg.

# **Relevance to Institutional Mission and Strategic Plan**

Fayetteville State University, as a public comprehensive regional university, promotes the educational, social, cultural, and economic transformation of southeastern North Carolina and beyond. The B.S. in Professional Studies program, with its combination of technical and specialized courses, along with the core professional courses and general education component, will serve the region by preparing graduates for success in a variety of professions and work environments.

# Highlights from UNC-GA Data Template

Nine UNC campuses currently offer a baccalaureate degree in Interdisciplinary or Liberal Studies; the total enrollment in these nine programs has increased by more than 25% in the past three years, Fall 2007 – Fall 2010. Fayetteville State University has established two new baccalaureate programs in the past three years, and has discontinued two Masters and five baccalaureate programs.

## **Outcome of Consultation with Disciplinary Panel**

The panel included faculty members from ASU, ECU, and UNCG in addition to the FSU faculty presenters. Discussion was held on the overall curriculum of the program and how the program will be administered. There was consensus on the desirability of offering the B.S. in Professional Studies at Fayetteville State University.

## **Student Demand**

An online survey about this program was conducted in the spring semester 2010. Students and faculty at Fayetteville State University and Fayetteville Technical Community College were invited to participate. The survey yielded 147 respondents, of whom 128 (87%) identified themselves as students. In response to the question, "Will you consider enrolling in this program, advising others to enroll in this program, or hiring a graduate from this program?" 111 of 145 (77%) responded "yes." In response to the question, "Will this program provide a useful pathway to a four-year degree for students who may not otherwise have such an opportunity?" 133 of 146 (92%) responded "yes." FSU projects full enrollment of the program in its fourth year will be twenty full-time and forty part-time students.

# **Opportunities for Graduates of the Program**

One of the greatest needs in North Carolina is to increase the number of adults who hold a baccalaureate degree. The Lumina Foundation has quoted a recent analysis of occupation data and workforce trends in North Carolina by the Georgetown University Center on Education and the Workforce, which shows that by 2018, 59% of North Carolina's jobs will require postsecondary education. One strategy for developing the college-educated workforce essential for the state's future prosperity, the Lumina Foundation suggests, is to help adult learners with some college credit to earn a degree. The B.S.P.S. provides a useful pathway to a degree for these students. Further, increasing the number of college graduates is especially important for FSU's service region. In Cumberland and surrounding counties, the percentage of adults with a higher education degree ranges from 19% to 33%, which is lower than the percentage for the state (37%) and the nation (38%).

## **Resource Implications**

**Resource needs:** Because the proposed program is based on existing course offerings, no additional faculty positions, courses, library resources, equipment, or physical facilities are needed to implement this new program.

**Resources allocated:** A faculty coordinator for the program (50% release time) will be provided by reallocation of existing resources. The University College will absorb support and administrative responsibilities for the program.

**Estimated cost to the State:** Based on the University funding formula, in the fourth year, Fayetteville State University would generate additional state appropriations of approximately \$76,000 if fully funded by the General Assembly.

## **Recommendation**

It is recommended that the Board of Governors approve Fayetteville State University's request to establish a B.S. in Professional Studies degree program (CIP 24.0101).

#### Degree Area and Level:

B.S. in Professional Studies (CIP 24.0101) at Fayetteville State University

#### Addressing UNC Tomorrow:

This proposed program would address several Recommendations within the UNC Tomorrow Report including the components to enhance Our Global Readiness (Recommendation 4.1), Our Citizens and Their Future: Access to Higher Education (Recommendation 4.2), and Our Communities and Their Economic Transformation (Recommendation 4.4).

#### Role of Program in Relation to State and Regional Needs:

According to the proposal, "One of the greatest needs in North Carolina is to increase the number of adults who hold a baccalaureate degree. The Lumina Foundation quotes a recent analysis of occupation data and workforce trends in North Carolina by the Georgetown University Center on Education and the Workforce, which shows that by 2018, 59 percent of North Carolina's jobs will require postsecondary education by 2018. One strategy for developing the college-educated workforce essential for the state's future prosperity, the Lumina Foundation suggests, is to help adult learners with some college credit to earn a degree. The B.S.P.S. provides a useful pathway to a degree for these students. If increasing the number of college graduates is important for North Carolina as a whole, it is especially so for FSU's service region. In Cumberland and surrounding counties, the percentage of adults with a higher education degree ranges from 19% to 33%, which is lower than the percentage for the state (37%) and the nation (38%)."

## US Labor Department Analysis:

- Summary - N/A

## Availability of Program Statewide (Enrollment and Degrees Awarded in Last 3 Years):

- *Public universities* - A number of UNC campuses offer undergraduate degree programs in Interdisciplinary Studies, Multidisciplinary Studies, Liberal Studies, or Special Studies with the same CIP code as the proposed program. Exception is WSSU program that has CIP code of 24.0102.

| τ      | Upper Division Enrollmen               | t       |     |     | Aca  | demic Y | lear |     |      |
|--------|--|---------|-----|-----|------|---------|------|-----|------|
|        |  |         |     | Spr | Fall | Spr     | Fall | Spr | Fall |
|        |  |         | 07  | 08  | 08   | 09      | 09   | 10  | 10   |
| ASU    | Interdisciplinary Studies              | BA      | 75  | 71  | 68   | 40      | 28   | 21  | 21   |
| ECU    | Multidisciplinary<br>Studies           | BA & BS | 25  | 21  | 18   | 16      | 21   | 30  | 25   |
| NCA&T  | Liberal Studies                        | BA      | 121 | 133 | 170  | 174     | 160  | 160 | 165  |
| NCSU   | Interdisciplinary Studies              | BA & BS | 10  | 13  | 14   | 12      | 11   | 10  | 11   |
| UNCA   | Interdisciplinary Studies              | BA      | 11  | 13  | 27   | 32      | 35   | 37  | 37   |
| UNC-CH | Interdisciplinary Studies              | BA      | 8   | 10  | 9    | 9       | 6    | 7   | 5    |
| UNCG   | Special Programs in<br>Liberal Studies | BA      | 192 | 264 | 290  | 153     | 345  | 349 | 325  |
| WCU    | Special Studies                        | BA & BS | 0   | 0   | 0    | 1       | 1    | 2   | 2    |
| WSSU   | Interdisciplinary Studies              | BA      | 128 | 138 | 147  | 147     | 135  | 136 | 136  |

|        | Number of Degrees Awarded           | А       | cademic Yea | ır        |           |
|--------|-------------------------------------|---------|-------------|-----------|-----------|
|        |                                     |         | 2007-2008   | 2008-2009 | 2009-2010 |
| ASU    | Interdisciplinary Studies           | BA      | 29          | 17        | 21        |
| ECU    | Multidisciplinary Studies           | BA & BS | 10          | 18        | 12        |
| NCA&T  | Liberal Studies                     | BA      | 50          | 91        | 82        |
| NCSU   | Interdisciplinary Studies           | BA & BS | 15          | 7         | 9         |
| UNCA   | Interdisciplinary Studies           | BA      | 7           | 9         | 15        |
| UNC-CH | Interdisciplinary Studies           | BA      | 2           | 8         | 3         |
| UNCG   | Special Programs in Liberal Studies | BA      | 47          | 62        | 72        |
| WCU    | Special Studies                     | BA & BS | 0           | 1         | 3         |
| WSSU   | Interdisciplinary Studies           | BA      | 56          | 54        | 82        |

- Private universities

| Belmont Abbey College            | BA Liberal Studies                  |
|----------------------------------|-------------------------------------|
| Bennett College                  | BA and BS Interdisciplinary Studies |
| Brevard College                  | BA Interdisciplinary Studies        |
| Chowan University                | BA and BS Interdisciplinary Studies |
| Davidson College                 | BA and BS Interdisciplinary Studies |
| Duke University                  | BA and BS Interdisciplinary Studies |
| Greensboro College               | BA and BS Liberal Studies           |
| Guilford College                 | BA Interdisciplinary Studies        |
| High Point University            | BA Individualized Major             |
| Johnson C. Smith University      | BA Interdisciplinary Studies        |
| Lees-McRae College               | BA and BS Interdisciplinary Studies |
| Lenoir-Rhyne University          | BA Liberal Studies                  |
| Peace College                    | BA Liberal Studies                  |
| Pfeiffer University              | BA Interdisciplinary Studies        |
| Saint Augustines College         | BS Liberal Studies                  |
| Salem College                    | BA Integrative Studies              |
| Shaw University                  | BA Liberal Studies                  |
| St. Andrews Presbyterian College | BA Interdisciplinary Studies        |
| Warren Wilson College            | BA Integrative Studies              |
| Wingate College                  | Bachelor of Liberal Studies         |
|                                  |                                     |

Source: National Center for Education Statistics - <u>http://nces.ed.gov/collegenavigator/</u>

*Available in Online or Distance Format from UNC institutions:* WSSU offers the Bachelor of Interdisciplinary Studies (CIP 24.0102) through UNC Online. UNCG offers the BA in Liberal Studies (CIP 24.0101) through UNC Online.

Available from Academic Common Market: North Carolina does not participate in the ACM at the undergraduate level.

## FSU Campus enrollment and degrees awarded in similar programs at the Bachelors level:

(Based on two CIP digits – 24 CIP is the summary group for Liberal Arts and Sciences, General Studies and Humanities under which Professional Studies is listed as a program.) FSU does not offer any undergraduate degrees in the 24 CIP.

# Campus Average of enrollment and degrees awarded per degree program in this area at the Bachelors level over the last 3 Academic Years, Fall 2007-Fall 2010:

(Based on two CIP digits – 24 CIP is the summary group for Liberal Arts and Sciences, General Studies and Humanities under which Professional Studies is listed as a program.

|        | Ca                           | ampus Average                             |                             |
|--------|------------------------------|---|-----------------------------|
|        | Number of Active<br>Programs | Upper Division<br>Enrollment per Semester | Degrees Awarded per<br>Year |
| ASU    | 1                            | 46  | 22                          |
| ECU    | 1                            | 22  | 13                          |
| NCA&T  | 1                            | 155                                       | 74                          |
| NCSU   | 2                            | 20  | 7                           |
| UNCA   | 1                            | 27  | 10                          |
| UNC-CH | 1                            | 8   | 4                           |
| UNCG   | 1                            | 274                                       | 60                          |
| WCU    | 1                            | 2   | 1                           |
| WSSU   | 1                            | 138                                       | 64                          |
|        | Campus Average:              | 77  | 28                          |

## FSU Campus Degree Programs added in the past three years:

– Bachelor

- BA Intelligence Studies (11/13/2009)
- BSW Social Work (08/13/2010)
- Master

N/A

– Doctoral

N/A

## FSU Campus Degree Programs discontinued in the past three years:

- Bachelor
  - BS Business Education, Secondary (03/20/2009)
  - BA Health Education K-12 (03/20/2009)
  - BS Marketing Education for Teachers (03/20/2009)
  - BS Social Sciences, Secondary Education (02/11/2011)
  - BS Spanish Education K-12 (02/11/2011)
- Master
  - MA English (02/11/2011)
  - MA Political Science (02/11/2011)
- Doctoral
  - N/A

## Request for Authorization to Establish a Bachelor of Science in Sport Management at Elizabeth City State University

Elizabeth City State University requests authorization to establish a B.S. in Sport Management degree program (CIP 31.0504).

# **Program Description**

The department of Health and Physical Education at Elizabeth City State University is requesting authorization to establish a new degree program in Sport Management. Since 2004, the department is currently offering Sport Management as a concentration under the Bachelor of Science degree program in Physical Education. Graduates in this program are prepared to begin careers with professional sports teams, athletic departments, sports communication, sports agencies, health and fitness facilities, and parks and recreation organizations. The Bachelor of Science in Sport Management will also prepare students for advanced study in graduate programs in Business and Management. The 124 semester credit hour Sport Management Program requires course work in economics, business, organizational leadership, sport law, human resources management, business and economic statistics, sport finance, public speaking, mass media, sports psychology, marketing and media, and information systems. The course of study also requires a supervised internship during the senior year. As with the existing program, the proposed degree will have concentrations in sport communication, marketing and promotion.

## **Relevance to Institutional Mission and Strategic Plan**

The proposed program is consistent with ECSU's institutional mission and strategic plan, as the program of study has been offered since 2004 as a concentration under the Bachelor of Science degree program in Physical Education.

# Highlights from UNC-GA Data Template

Four UNC institutions offer a baccalaureate degree program in sport and fitness administration/ management (NCA&T, NCSU, WCU, and WSSU); the total enrollment in these four programs has increased by 14% in the past three years, Fall 2007 – Fall 2010. Fifteen private institutions offer a similar degree. Elizabeth City State University has established no new programs in the past three years, and has discontinued three baccalaureate programs.

# **Outcome of Consultation with Disciplinary Panel**

The panel included faculty members from ECU, NCSU, and WSSU in addition to the ECSU faculty presenters. Discussion focused on the overall curriculum, required internship, and the content included in some of the major courses. There was consensus on the desirability of offering this program at ECSU.

# **Student Demand**

Since 2004, the Sport Management concentration at ECSU has graduated nearly fifty students. ECSU states there is significant demand by students for this program. According to the

proposal, many students are interested in opening businesses that manage professional athletes, while others have indicated a desire to work at the governance offices for athletics and sports. ECSU projects enrollment of the program in its fourth year will be 50 full-time upper division students.

## **Opportunities for Graduates of the Program**

The occupational outlook for sports managers, according to the U.S. Bureau of Labor and Statistics, predicts that employment for sports agents should grow at an average rate through 2016. The proposal states that a significant number of students come to ECSU wanting to major in physical education; they anticipate careers in athletics as sport managers, promoters, broadcasters, and sport marketing professionals.

# **Resource Implications**

**Resource needs:** Because the proposed program is based on the existing curricula in the Sport Management concentration under the Bachelor of Science degree program in Physical Education, no additional faculty positions, courses, library resources, equipment, or physical facilities are needed to implement this new program.

**Resources allocated:** In the 2010-11 year, ECSU allocated from existing resources two new faculty positions in support of this program.

**Estimated cost to the State:** Based on the University funding formula, in the fourth year, ECSU would generate additional state appropriations of approximately \$119,000 if fully funded by the General Assembly.

## **Recommendation**

It is recommended that the Board of Governors approve Elizabeth City State University's request to establish a B.S. in Sport Management degree program (CIP 31.0504).

## Degree Area and Level:

B.S. in Sport Management (CIP 31.0504) at Elizabeth City State University

## Addressing UNC Tomorrow:

This proposed program would address several Recommendations within the UNC Tomorrow Report including the components to enhance Our Global Readiness (Recommendation 4.1), Our Citizens and Their Future: Access to Higher Education (Recommendation 4.2), and Our Communities and Their Economic Transformations (Recommendation 4.4).

## Role of Program in Relation to State and Regional Needs:

According to the proposal, "Graduates in sport management will be prepared to begin careers in areas with professional sport teams, collegiate athletic departments, sport communications and public relation firms, sport agencies, health and fitness facilities, and parks, and recreation organizations."

## US Labor Department Analysis:

– Summary – N/A

## Availability of Program Statewide (Enrollment and Degrees Awarded in Last 3 Years):

- Public universities

|       | Upper Division Enrollment                      |    |            |           | Acad       | lemic Year |            |           |            |  |
|-------|--|----|------------|-----------|------------|------------|------------|-----------|------------|--|
|       |  |    | Fall<br>07 | Spr<br>08 | Fall<br>08 | Spr<br>09  | Fall<br>09 | Spr<br>10 | Fall<br>10 |  |
| NCA&T | Sport and Fitness<br>Administration/Management | BS | 133        | 150       | 166        | 204        | 167        | 178       | 177        |  |
| NCSU  | Sport and Fitness<br>Administration/Management | BS | 151        | 162       | 163        | 169        | 175        | 179       | 167        |  |
| WCU   | Sport and Fitness<br>Administration/Management | BS | 48         | 62        | 57         | 60         | 52         | 60        | 48         |  |
| WSSU  | Sport and Fitness<br>Administration/Management | BS | 51         | 52        | 44         | 41         | 43         | 41        | 45         |  |

|       | Number of Degrees Awarded                      |    |           | Academic Yea | r         |
|-------|--|----|-----------|--------------|-----------|
|       |  |    | 2007-2008 | 2008-2009    | 2009-2010 |
| NCA&T | Sport and Fitness<br>Administration/Management | BS | 30        | 57           | 53        |
| NCSU  | Sport and Fitness<br>Administration/Management | BS | 53        | 81           | 81        |
| WCU   | Sport and Fitness<br>Administration/Management | BS | 34        | 23           | 31        |
| WSSU  | Sport and Fitness<br>Administration/Management | BS | 14        | 16           | 18        |

## - Private universities

| Barton College              | BS Sport Management  |
|-----------------------------|--|
| Belmont Abbey College       | BA Sport Management  |
| Catawba College             | BS Sport Management  |
| Elon University             | BS Sport and Event Management                              |
| Gardner-Webb University     | BS Sport Management  |
| Guilford College            | BS Sport Management  |
| Johnson C. Smith University | BS Sport Management  |
| Lees-McRae College          | BS Sport Management  |
| Lenoir-Rhyne University     | BA Sports Management                                       |
| Livingstone College         | BS Sport Management  |
| Mars Hill College           | BS Recreation and Sport Management                         |
| Mount Olive College         | BA and BS Recreation and Leisure Studies: Sport Management |
| Pfeiffer University         | BA Sports Management                                       |
| Saint Augustines College    | BS Sport Management  |
| Wingate College             | BS Sport Management  |

Source: National Center for Education Statistics - http://nces.ed.gov/collegenavigator/

## Available in Online or Distance Format from UNC institutions: N/A

Available from Academic Common Market: North Carolina does not participate in the ACM at the undergraduate level.

*ECSU Campus enrollment and degrees awarded in similar programs at the Bachelors level:* (*Based on two CIP digits – 31 CIP is the summary group for Parks, Recreation, Leisure, and Fitness Studies under which Sport Management is listed as a program.*) ECSU does not offer any undergraduate degrees in the 31 CIP.

# Campus Average of enrollment and degrees awarded per degree program in this area at the Bachelors level over the last 3 Academic Years, Fall 2007-Fall 2010:

| Campus Average |               |                |                 |  |  |  |
|----------------|---------------|----------------|-----------------|--|--|--|
|                | Number of     | Upper Division | Degrees Awarded |  |  |  |
|                | Active        | Enrollment per | per Year        |  |  |  |
|                | Programs      | Semester       |                 |  |  |  |
| ASU            | 2             | 179            | 55              |  |  |  |
| ECU            | 2             | 123            | 64              |  |  |  |
| NCA&T          | 1             | 168            | 47              |  |  |  |
| NCCU           | 2             | 73             | 20              |  |  |  |
| NCSU           | 2             | 181            | 81              |  |  |  |
| UNC-CH         | 1             | 402            | 177             |  |  |  |
| UNCC           | 1             | 214            | 44              |  |  |  |
| UNCG           | 2             | 185            | 63              |  |  |  |
| UNCP           | 1             | 94             | 46              |  |  |  |
| UNCW           | 2             | 77             | 51              |  |  |  |
| WCU            | 2             | 49             | 28              |  |  |  |
| WSSU           | 3             | 58             | 16              |  |  |  |
| Car            | mpus Average: | 150            | 58              |  |  |  |

(Based on two CIP digits – 31 CIP is the summary group for Parks, Recreation, Leisure, and Fitness Studies under which Sport Management is listed as a program.)

## ECSU Campus Degree Programs added in the past three years:

- Bachelor
  - N/A
- Master
  - N/A
- Doctoral
  - N/A

#### ECSU Campus Degree Programs discontinued in the past three years:

- Bachelor
  - BS Special Education: Mental Retardation (03/20/2009)
  - BS Special Education: Learning Disabilities (03/20/2009)
  - BS Music Industry Studies (02/11/2011)
- Master
  - N/A
- Doctoral
  - N/A

## **Request for Authorization to Establish a Bachelor of Science in Information Technology at UNC Wilmington**

The University of North Carolina at Wilmington requests authorization to establish a B.S. in Information Technology degree program (CIP 11.0103).

## **Program Description**

The Department of Computer Science in the College of Arts and Sciences and the Department of Information Systems and Operations Management in the Cameron School of Business are requesting to offer a multi-disciplinary program leading to a BS degree in Information Technology (IT). The field of Information Technology is defined as "the study, design, development, implementation, support or management of computer-based information systems, particularly software applications and computer hardware." Graduates will be able to evaluate current and emerging technologies; identify user needs; design user-friendly interfaces; apply, configure, and manage IT technologies; assess IT impact on individuals, organizations, and the environment; and apply fundamental IT concepts and strategies to real-world problems. A new state-of-the-art Computer Information Systems Building will house the proposed 124 semester credit hour Information Technology program.

# **Relevance to Institutional Mission and Strategic Plan**

The proposed degree program is fully consistent with the mission of UNCW. The importance of the disciplines of computer science, computer information systems, and information technology to Southeastern North Carolina's economic development underscores the relevance of this new degree program to UNCW's support of regional and state interests.

# Highlights from UNC-GA Data Template

Three UNC campuses currently offer a baccalaureate degree in Information Technology (ECU, UNCP, and WSSU). No private institutions currently offer this degree. In the past three years, UNC Wilmington has established four new baccalaureate and four new Masters programs, and has discontinued five baccalaureate and two Masters programs.

## **Outcome of Consultation with Disciplinary Panel**

The panel included faculty members from ECU, UNCC, UNCP, and WSSU in addition to the UNCW faculty presenters. Discussion centered on the interdisciplinary aspects of this degree program, and the benefits that graduates will realize. There was consensus on the desirability of offering this program at UNC Wilmington.

## **Student Demand**

Student demand for degree programs in Information Technology is indicated by the number of student minors in IT, and survey data from current students. UNCW started an IT Minor in 2004; there are 40 students enrolled in the program, and it is currently one of the largest minors at the university. In addition, a Spring 2008 survey to 104 undergraduate UNCW students in several

lower-level computer science and management information systems courses found that 49% (51 of the 104 students) indicated that they would consider a degree in Information Technology if it were available. Since most of the students responding to the survey were not Computer Science and/or Management Information Systems majors (only 21 of the 104 students listed CSC or MIS as their intended major), it appears there is appropriate demand for this new major. UNCW projects full enrollment of the program in its fourth year will be 30 full-time and 4 part-time upper division students.

# **Opportunities for Graduates of the Program**

According to the proposal, "The UNC Tomorrow report projects the demand for *new* computer and technology workers to be 23,000 by 2014. This is the third highest growth profession for North Carolina." In addition, the Bureau of Labor and Statistics (BLS) lists "information" as one of the top eight areas for future employment with jobs growing by more than 11% by 2014, with some areas growing as much as 67%. The BLS also states that the five fastest growing occupations are "technology"-based with a projection of an additional 1.5 million jobs. The advisory board for the Information Systems and Computer Science departments at UNC Wilmington has reviewed the proposed program and indicated a high need for graduates of this program.

## **Resource Implications**

**Resource needs:** No additional library resources, equipment, or physical facilities are needed to implement this new program. One new faculty position will be needed in Year 2, and UNCW has committed to reallocating an existing position if no enrollment growth funding is available.

**Resources allocated:** Four new courses are currently being developed in-load. A Program Coordinator position (faculty release time) will be provided by reallocation of existing resources. The Department of Computer Science and the Department of Information Systems and Operations Management will jointly oversee the new program.

**Estimated cost to the State:** Based on the University funding formula, in the fourth year, UNC Wilmington would generate additional state appropriations of approximately \$109,000 if fully funded by the General Assembly.

# **Recommendation**

It is recommended that the Board of Governors approve UNC Wilmington's request to establish a B.S. in Information Technology degree program (CIP 11.0103).

## Degree Area and Level:

B.S. in Information Technology (CIP 11.0103) at UNC Wilmington

#### Addressing UNC Tomorrow:

This proposed program would address several Recommendations within the UNC Tomorrow Report including the components to enhance our Global Readiness (Recommendation 4.1) and Our Citizens and Their Future: Access to Higher Education (Recommendation 4.2).

#### Role of Program in Relation to State and Regional Needs:

According to the proposal, "The UNC Tomorrow report projects the demand for *new* computer and technology workers to be 23,000 by 2014. This is the third highest growth profession for North Carolina."

#### US Labor Department Analysis:

– Summary – N/A

## Availability of Program Statewide (Enrollment and Degrees Awarded in Last 3 Years):

• Public universities

| Upper Division Enrollment |                          |    |      |     | Aca  | demic Y | ear  |     |      |
|---------------------------|--------------------------|----|------|-----|------|---------|------|-----|------|
|                           |                          |    | Fall | Spr | Fall | Spr     | Fall | Spr | Fall |
|                           |                          |    | 07   | 08  | 08   | 09      | 09   | 10  | 10   |
| ECU                       | Information and Computer | BS | N/A  | N/A | 1    | 1       | 116  | 0   | 94   |
|                           | Technology               |    |      |     |      |         |      |     |      |
| UNCP                      | Information Technology   | BS | N/A  | N/A | N/A  | N/A     | 8    | 13  | 18   |
| WSSU                      | Information Technology   | BS | 10   | 14  | 16   | 19      | 15   | 15  | 19   |

|      | Number of Degrees Awarded           | Academic Year |           |           |           |
|------|-------------------------------------|---------------|-----------|-----------|-----------|
|      |                                     |               | 2007-2008 | 2008-2009 | 2009-2010 |
| ECU  | Information and Computer Technology | BS            | 29        | 26        | 35        |
| UNCP | Information Technology              | BS            | N/A       | N/A       | 3         |
| WSSU | Information Technology              | BS            | 0         | 5         | 9         |

- Private universities – N/A

*Available in Online or Distance Format from UNC institutions:* According to the Distance Education Inventory, ECU is approved to offer the BS in Information and Computer Technology online.

Available from Academic Common Market: North Carolina does not participate in the ACM at the undergraduate level.

UNCW Campus enrollment and degrees awarded in similar programs at the Bachelors level: (Based on two CIP digits –11 CIP is the summary group for Computer and Information Sciences and Support Services under which Information Technology is listed as a program.)

| Upper Division Enrollment |                  |    | Academic Year |        |         |        |         |        |         |
|---------------------------|------------------|----|---------------|--------|---------|--------|---------|--------|---------|
|                           |                  |    | Fall 07       | Spr 08 | Fall 08 | Spr 09 | Fall 09 | Spr 10 | Fall 10 |
| UNCW                      | Computer Science | BS | 25            | 31     | 23      | 24     | 26      | 35     | 43      |

| Number of Degrees Awarded |                  |    | Academic Year |           |           |  |
|---------------------------|------------------|----|---------------|-----------|-----------|--|
|                           |                  |    | 2007-2008     | 2008-2009 | 2009-2010 |  |
| UNCW                      | Computer Science | BS | 20            | 16        | 22        |  |

Campus Average of enrollment and degrees awarded per degree program in this area at the Bachelors level over the last 3 Academic Years, Fall 2007-Fall 2010:

(Based on two CIP digits –11 CIP is the summary group for Computer and Information Sciences and Support Services under which Information Technology is listed as a program.)

| Campus Average |                  |                           |                 |  |  |  |
|----------------|------------------|---------------------------|-----------------|--|--|--|
|                | Number of Active | Upper Division Enrollment | Degrees Awarded |  |  |  |
|                | Programs         | per Semester              | per Year        |  |  |  |
| ASU            | 1                | 79                        | 23              |  |  |  |
| ECU            | 2                | 72                        | 26              |  |  |  |
| ECSU           | 1                | 37                        | 13              |  |  |  |
| FSU            | 1                | 52                        | 12              |  |  |  |
| NCA&T          | 1                | 106                       | 28              |  |  |  |
| NCCU           | 2                | 42                        | 10              |  |  |  |
| UNCA           | 2                | 36                        | 17              |  |  |  |
| UNC-CH         | 2                | 42                        | 22              |  |  |  |
| UNCC           | 1                | 354                       | 85              |  |  |  |
| UNCG           | 2                | 94                        | 26              |  |  |  |
| UNCP           | 2                | 24                        | 7               |  |  |  |
| UNCW           | 1                | 30                        | 19              |  |  |  |
| WCU            | 1                | 26                        | 7               |  |  |  |
| WSSU           | 3                | 30                        | 9               |  |  |  |
|                | Campus Average:  | 73                        | 22              |  |  |  |

## UNCW Campus Degree Programs added in the past three years:

- Bachelor
  - BS Community Health Education (06/13/2008)
  - BS Oceanography (02/12/2010)
  - BA International Studies (04/09/2010)
  - BS Exercise Science (06/11/2010)
- Master
  - MA Environmental Studies (01/11/2008)
  - MA Spanish (01/11/2008)
  - MS Clinical Research and Product Development (04/09/2010)
  - MS Coastal and Ocean Policy (11/11/2011)
  - Doctoral
    - N/A

#### UNCW Campus Degree Programs discontinued in past three years:

- Bachelor
  - BA Special Education, Cross-Categorical (03/20/2009)
  - BA Special Education, Behaviorally/Emotionally Handicapped (03/20/2009)
  - BA Special Education, Mental Retardation (03/20/2009)
  - BA Special Education, Learning Disabilities (03/20/2009)
  - BA History, Teacher Licensure (03/20/2009)
- Master
  - MA Mathematics (03/20/2009)
  - MEd Special Education (02/12/2010)
- Doctoral
  - N/A