**Ogden College of Science and Engineering**

**Office of the Dean**

**745-4449**

**REPORT TO THE UNIVERSITY CURRICULUM COMMITTEE**

Date: November 28, 2011

The Ogden College of Science and Engineering submits the following action items for consideration:

1. New Business

|  |  |
| --- | --- |
| **Type of item** | **Description of Item & Contact Information** |
| Action | **Revise Course Credit Hours**  MATH 498, Senior Seminar  Contact: Nezam Iraniparast, [nezam.iraniparast@wku.edu](mailto:nezam.iraniparast@wku.edu), x56218 |
| Action | **Create a New Certificate**  CNSS 4011 Certificate (memo attached)  Contact: Rong Yang, [rong.yang@wku.edu](mailto:rong.yang@wku.edu), x52940  James Gary, [james.gary@wku.edu](mailto:james.gary@wku.edu), x6373 |

9/30/2011

**Ogden College of Science and Engineering**

**Department of Mathematics and Computer Science**

**Proposal to Revise Course Credit Hours**

**(Action Item)**

Contact Person: Name, Nezam Iraniparast, email, nezam.iraniparast@wku.edu phone:56218

**1. Identification of course:**

* 1. Current course prefix (subject area) and number: MATH 498
  2. Course title: Senior Seminar
  3. Credit hours: 3

**2. Proposed course credit hours: 1-3**

**3. Rationale for the revision of course credit hours:**

MATH 498 was originally 1 credit hour. Effective Spring 2012, the number of credit hours for MATH 498 increased to 3 at the same time that the number of hours in the each of the mathematics major programs that require it was increased as part of the program revision process. However, for students entering prior to this year, students were required to have at least six hours at the 400-level. Since MATH 498 was only one credit hour, students had to take two other MATH 400 courses. With the change from one to three credit hours, students entering prior to this year can now graduate with MATH 498 plus just one more course at 400 - level, because this will give them the 6 hours they need. This was not the original intent of the program. Furthermore, some of these students were planning on taking the course as a one-credit class. By changing it to three credits, some of these students will be over the maximum allowable credit hours in a semester potentially affecting their graduation date. Allowing MATH 498 to be a variable credit-hour course will ensure that the students entering prior to fall 2011 can graduate with their intended program without affecting their date of graduation. If the catalog year is 2010 or earlier the student will receive one credit hour and students with the catalog year 2011 and after will receive 3 credit hours.

**4. Proposed term for implementation:** Spring 2012

**5. Dates of prior committee approvals:**

Mathematics and Computer ScienceDepartment: \_\_Sept. 30, 2011\_\_\_\_\_

OCSE Curriculum Committee \_\_Oct. 13, 2011\_\_\_\_\_

Professional Education Council \_\_November 9, 2011\_

Undergraduate Curriculum Committee \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

University Senate \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Attachment: Course Inventory Form**

Proposal Date: 9/8/11

**Ogden College of Science and Engineering**

**Department of Mathematics and Computer Science**

**Proposal to Create a New Certificate Program**

**(Action Item)**

Contact Person: Rong Yang, [rong.yang@wku.edu, 745-2940](mailto:rong.yang@wku.edu,%20745-2940)

James Gary, [james.gary@wku.edu](mailto:james.gary@wku.edu), 745-6373

**1. Identification of program:**

* 1. Program title:

CNSS 4011 Certificate

* 1. Required hours in program:

6 hours

* 1. Special information:

The Information Assurance Courseware Evaluation (IACE) Program has evaluated WKU’s CS 157 and CS 257 courses and verified that they meet all of the requirements of the Committee on National Security Systems (CNSS) National Training Standard for Information Systems Security (INFOSEC) Professionals, NSTISSI No. 4011.

As a result, WKU is entitled to issue a 4011 information assurance certificate to any student who successfully completes that sequence of two courses with a grade of C or better in each course.

* 1. Catalog description:

CNSS 4011 Certificate requires a minimum of 6 semester hours. It is designed for students wishing to gain knowledge in the information assurance area. The student pursuing the certificate must complete the following course sequence with a grade of C or better in each course:

CS 157, Information Security I, (3 hours)

CS 257, Information Security II, (3 hours)

**2. Objectives of the proposed certificate program:**

The purpose of offering this certificate is to provide students with nationally recognized documentary evidence of their information assurance training.

**3. Rationale:**

* 1. Reason for developing the proposed certificate program:

Satisfying the 4011 standard is the first step in the process of obtaining a CAE (Center of Academic Excellence in Information Assurance) designation for Western Kentucky University.

* 1. Relationship of the proposed certificate program to other programs now offered by the department:

None

* 1. Relationship of the proposed certificate program to certificate programs offered in other departments:

None

* 1. Projected enrollment in the proposed certificate program:

20 to 30 students annually based upon the enrollment of CS 157 and CS 257.

* 1. Similar certificate programs offered elsewhere in Kentucky and in other states (including programs at benchmark institutions):

Many universities that have satisfied the 4011 standard offer their students a certificate for completing the required coursework. Examples include: Florida State University, New Jersey City University, the National Defense University, Villanova University, Indiana University of Pennsylvania, and the University of Maryland University College. To the best of our knowledge, no university in Kentucky is currently offering a 4011 certificate.

* 1. Relationship of the proposed certificate program to the university mission and objectives:

The training provided in the courses leading up to 4011 certification certainly provides tools for students at WKU to be both productive and socially responsible members of the global society as stated in the mission statement.

**4. Curriculum:**

CS 157, Information Security I, (3 hours)

CS 257, Information Security II, (3 hours)

Both of these courses have already been approved and are being offered on a regular schedule.

**5. Budget implications:**

Existing faculty will continue to teach the courses in the program.

**6. Proposed term for implementation:**

Ideally, we would like to be able to issue certificates to students who complete the training in May 2012.

**7. Dates of prior committee approvals:**

Math and CSDepartment/Division: \_\_\_\_Sept. 22, 2011\_\_\_

OCSE Curriculum Committee \_\_\_\_Oct. 13, 2011\_\_\_

Undergraduate Curriculum Committee \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

University Senate \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Memo on Creating 4011 Certificate Program**

Recently WKU received a certificate from the National Security Agency (NSA) and the Committee on National Security Systems (CNSS). This certificate is one-step in WKU’s effort to become a Center of Academic Excellence (CAE). Dr. Rong Yang is currently leading our effort and has been very successful in matching WKU’s nascent Information Security/Assurance program with the stringent requirements of the NSA/CNSS CAE program.

The purpose of the NSA/CNSS CAE program is to promote higher education and research into information security (INFOSEC) and information assurance (IA). Students attending a CAE-designated school are eligible for scholarships and grants from the NSA and the Department of Homeland Security. The CAE program has essentially three levels: a 2-year college program (CAE2Y), a four-year college program (CAE/IAE), and a graduate program (CAE-R). The purpose of this differentiation is to ensure the maximum possible distribution of educational opportunities for IA/INFOSEC professionals. The CAE/IAE program, wherein WKU was awarded its certificate, is only available to four-year universities.

There seems to be some confusion whether this violates the CPE rules on certificates whereby only KCTCS schools can issue certificates. We must remember that there is a special program for 2-year colleges (CAE2Y) under which KCTCS members could participate. Furthermore the certificate issued by WKU will allow our students to participate in grants and scholarships from NSA and DHS. It is not a professional certificate but merely indicating that the student has completed a certain amount of IA/INFOSEC coursework.

We would be happy to work with KCTCS members to obtain a CAE2Y certification. Both NSA and CNSS would look favorably on this effort since there is currently **NO** CAE in Kentucky. Tennessee currently has 3 CAEs: the University of Memphis, the University of Tennessee at Chattanooga, and the Fountainhead College of Technology which demonstrates that states can have CAEs at all three levels. In Texas, there are multiple CAEs including our Sunbelt rival, the University of North Texas. KCTCS currently offers an “Information Security Certificate” which covers very fundamental material on INFOSEC/IA but could be enhanced to cover the material required by NSA and CNSS.

In order to prevent confusion, we have renamed the certificate program to “CNSS 4011 Certificate”. We hope that this explanation and the name change will mitigate any fears that we are usurping KCTCS prerogatives.