For an explanation of the curriculum change process, please see www.uncw.edu/fac_handbook/responsibilities/teaching/curriculum.htm.

Cameron School of Business

University of North Carolina Wilmington
PROPOSAL FOR UNDERGRADUATE CURRICULUM CHANGE

Department or Academic Unit: Information Systems and Operations Management
Type of Proposal: Check **all** that apply and answer the questions below.

☑ **New Course** *(attach syllabus)* ☐ **Deletion of Course** ☐ **Degree Requirement** ☐ **Trial Course**

☐ **Course Change** *(Check all that apply)*:

☐ **Prefix/Number** ☐ **Title** ☐ **Description** ☐ **Credit Hours** ☐ **Contact Hours**

☐ **Pre/Corequisite** ☐ **Restrictive Statement** ☐ **Crosslist** ☐ **Uncrosslist**

☐ **Other:**

To become effective: Semester: Fall Year: 2009 **To be offered:** ☑ **Fall** ☐ **Spring** ☐ **Summer**

☐ **on Request** ☐ **Alternate Years**

Current course prefix, number and title:

New course prefix, number and title: CIT 445 - Platform Technologies

Abbreviated course title (30 spaces maximum): Platform Technologies

Type of course: ☑ Lecture ☐ Seminar ☐ Lab ☐ Practicum ☐ Internship ☐ Other

Credit hours: 3 Credit hour change: From: To: **Contact hours:** 3 Contact hour change: From: To:

Restrictions (If repeatable the number of hours this course may be taken for credit, open only to students within the major, etc.):

Crosslisted with (course prefix and number): **Uncrosslist with** (course prefix and number)

(To crosslist/uncrosslist courses, a curriculum change form submitted by both departments is required.)

○ Yes ◉ No **Is this course a renumbering (it replaces an existing course)? If yes, which course?**

○ Yes ◉ No **And should the existing course be deleted?** *(If yes, a separate curriculum change form requesting this deletion is required.)*

○ Yes ◉ No **Is this course currently approved for basic studies?**

○ Yes ◉ No **Will it be submitted for basic studies approval?**

○ Yes ◉ No **Is this course currently approved for oral competency?**

○ Yes ◉ No **Will it be submitted for oral competency approval?**

○ Yes ◉ No **Is this course currently approved for computer competency?**

○ Yes ◉ No **Will it be submitted for computer competency approval?**

◉ Yes ○ No **Is it required for a major/minor/option in your department?** *(If yes, please provide in the degree requirement section below the necessary change for degree requirements description in catalogue.)*

○ Yes ◉ No **Is it an elective for a major/minor/option in your department?** *(If yes, please provide in the degree requirement section below the necessary change for degree requirements description in catalogue.)*

Degree requirement as it would appear in the catalogue *(Include change to: total hours, new required courses, insertion and deletion of required courses, text, etc.)* If additional space is required, prepare on a separate page using the format of the current catalogue and attach to this form.

This course is part of a new degree program in Information Technology. Attached is the Request to Establish a new degree program document that contains all of the degree requirements.

◉ Yes ○ No **Is it a collateral requirement or elective for a major/minor/option for another department?** *(If yes, attach documentation listing the departments/programs affected and verifying that the departments were consulted.)*

◉ Yes ○ No **Are present staff and resources adequate to support this proposal?** *(If no, explain in the justification section how they will be provided.)*

Cameron School of Business

University of North Carolina Wilmington
PROPOSAL FOR UNDERGRADUATE CURRICULUM CHANGE

Course description change as it would appear in the catalogue *(Course description change: 50 words or less; include prefix, number, title, credit hours, crosslisting, pre/corequisites, etc.)*

CIT 445. Platform Technologies (3) Prerequisite: CIT 352. Fundamentals of hardware and software and how they integrate to form essential components of IT systems. Topics include digital logic, hardware design, virtual machine emulation, operating system principles, fault tolerance, power and heat budgets, servers and server farms, and enterprise deployment and management.

Justification for request or degree change:

This course is part of a new degree program in Information Technology. Attached is the Request to Establish a new degree program document.

◉ Yes ○ No **Does this proposal require University Curriculum Committee (UCC) or Faculty Senate approval** (refer to http://www.uncw.edu/facsen/ucc/)? *(If yes, after college/school curriculum committee approval, forward proposal to the UCC and complete and submit the appropriate UCC form(s). If approved, this proposal must be signed by the UCC Chair and Faculty Senate President and forwarded to the Provost.)*

Recommended and approved by:

Cem Canel 9-22-08
Department Chairperson Date

Dean of the College or School Date

Chair, College or School Curriculum Committee Date

*Chair, University Curriculum Committee Date

Teacher Education Council *(WSE use only)* Date

*President, Faculty Senate Date

Provost Date

**Obtain signatures of the UCC Chair and the Faculty Senate President only if required for this proposal.*

Forms not filled out completely or lacking documentation will be returned.

Platform Technologies
CIT 445

Course Information	**Class Time and Location:** **Instructor:** **Office:** **Office Hours:** **Phone:** **Email:**
Course Description	IT professionals will encounter a variety of platforms in their career. The role of the IT professional is to select, deploy, integrate and administer platforms or components to support the organization's IT infrastructure. This knowledge area includes the fundamentals of hardware and software and how they integrate to form essential components of IT systems.
Prerequisites	CIT 352
Textbook and Materials Required	*An Introduction to Hardware and Software Design*, by L.L. Wear, J.R. Pinkert, L.C. Wear, and W.G. Lane, McGraw-Hill, 1991.
Handouts	Additional handouts will be used in this class throughout the semester. Check the course website for these documents.
Withdrawal Policy	Check the registrar's website to determine the Add / Drop date for this semester. Students who simply stop attending classes without officially withdrawing usually are assigned failing grades. Students wishing to withdraw after the scheduled change period (add/drop) must obtain and complete a withdrawal form from the Registrar's Office.
Project Requirements	All students in this course will be required to complete a project. Additional details will be given out in class.
Disabilities	If you have a disability and need reasonable accommodation in this course, you should inform me of this fact in writing within the first week of class or as soon as possible. If you have not already done so, you must register with the Office of Disability Services in Westside Hall (extension 3746) and obtain a copy of your Accommodation Letter. You should then meet with me to make mutually agreeable arrangements based on the recommendations of the Accommodation Letter.

Grading and Grading Policy

The distribution of the grades will be as follows.

Exams	50%
Topic paper	25%
Presentation	15%
Class participation and discussions	10%

The grading will be based on the following grading scheme (note +'s and -'s are NOT given in this course).

Range	*Grade*
90 - 100	A
80 - 89	B
70 - 79	C
< 70	F

The instructor retains the right to subjectively adjust an individual student's grade in appropriate cases, based upon observed performance.
All turned-in assignments will be neatly typed (word-processed) and printed with letter-quality type. Specific examples will be provided in class. Students failing to present the information completely, neatly and in the prescribed format will receive minimal credit for their work. Students should double check for spelling and grammar before submitting assignments.

Topics and Learning Outcomes

Hardware
Topics:
Digital logic & digital systems
Benchmarking
Serial vs. parallel
Implementation options
Basic electronics
Hardware design languages
Virtual machine emulation

Core learning outcomes:
1. Design a simple finite state machine with at least 6 states and 4 conditional branches, then build and troubleshoot it.
2. Compare the performance of two different computers with two different operating systems.
3. Rank the five main hardware implementation options in three different scenarios.
4. Compare and contrast the prevalent benchmarks utilized in academia and industry.

Architecture and Organization
Topics:

Machine-level representation of data
Assembly-level machine organization
Memory system organization & architecture
Interfacing and communication
Functional organization
Multiprocessing and alternative architectures
Performance enhancements

Core learning outcomes:
1. Describe how numbers and characters are represented in a computer.
2. Draw a block diagram, including interconnections, of the main parts of a computer.
3. Describe how a computer stores and retrieves information to/from memory and hard drives.
4. Define the terms: bus, handshaking, serial, parallel, data rate.

Computing Infrastructures
Topics:
Power and heat budgets
Servers
Server farms
Hardware and software integration

Core learning outcomes:
1. Estimate the power requirements for a computer system.
2. Explain the need for power and heat budgets within an IT environment.
3. Classify and describe the various types of servers and services required within organizations.
4. Describe the need for hardware and software integration.

Advanced learning outcomes:
1. Prepare a computer system for use as a server.
2. Design and implement a multi-computer network and deliver computing services on that network.
3. Perform a cost-benefit analysis for a proposed server solution.
4. Design a server farm for a given situation.

Academic Dishonesty Offenses

"Violation of any of the following standards subjects any student to disciplinary action:

A. PLAGIARISM
Plagiarism means the appropriation, buying, receiving as a gift, or obtaining by any means another person's work and the unacknowledged submission or incorporation of it in one's own work. It is doubly unethical, since it deprives the true author of his/her rightful credit and then gives that credit to someone to whom it is not due. The following three examples of plagiarism are described by Harold C. Martin and Richard M. Ohmann in their book The Logic and Rhetoric of Exposition (1963):

1. Word-for-Word copying. Whenever someone else is directly quoted, honesty and courtesy require acknowledgment of the source. The quoted material should be placed in quotation marks and its exact location should be indicated, either in the text of the student's paper or in a footnote.
2. The mosaic. To intersperse a few words of one's own here and there while basically copying the work of another is obviously unethical, unless one clearly acknowledges that this is being done. Should there be a valid reason for doing so then quotation marks or a general footnote should be used to show what belongs to the source and what one's own contribution is.
3. The paraphrase. Once more the crucial point is acknowledgment. Sometimes one can paraphrase in order to simplify, abbreviate, or improve upon an original, but the reader deserves to know what is being presented to him and whose work it represents. Therefore, acknowledgment of the source is required within the text of the student's paper or by footnote.

B. BRIBERY

The offering, giving, receiving or soliciting of any consideration in order to obtain a grade or other treatment not otherwise earned by the student through his/her own academic performance.

C. CHEATING

1. Any conduct during a program, course, quiz or examination which involves the unauthorized use of written or oral information, or information obtained by any other means of communication.
2. The unauthorized buying, selling, trading or theft of any examination, quiz, term paper or project.
3. The unauthorized use of any electronic or mechanical device during any program, course, quiz, or examination or in connection with laboratory reports or other materials related to academic performance.
4. The unauthorized use of laboratory reports, term reports, theses, or written materials in whole or in part.
5. The unauthorized assistance or collaboration on any test, assignment, or project.
6. The unauthorized use by a student of another student's work or the falsification of any other student's work.
7. Participating in, or permitting any of the above activities as defined in C 1-6."

(UNCW Academic Honor Code)