InterOffice Memo

To: JoAnne Malatesta, Chair, Undergraduate Academic Council
From: Peter A. Bloniarz, Interim Chair, Informatics Department
Date: March 28, 2012
Subject: Request to modify requirement of ICSI 201 in Major and Minor in Financial Market Regulation

Attached please find program change forms to modify the requirement of ICSI 201 in the faculty-initiated major in Financial Market Regulation and the minor in Financial Market Regulation. This request was submitted by David McCaffrey, the Academic Advisor for these programs; John Levato, Assistant Dean, School of Business; and George Berg, Chair, Department of Computer Science.

I fully support this change and would hope that the Undergraduate Academic Council can approve this so that the modification can happen in time for next Fall.

I would be happy to answer any questions you might have.

Thank you in advance for your efforts here.

Enc: Two program change forms
Request from Profs. McCaffrey and Berg, and Assistant Dean Levato

Cc: Prof. McCaffrey
Assistant Dean Levato
Prof. Berg
# Course and Program Action Form

**Proposal No.**

Please check one:  
- [ ] Course Proposal  
- [x] Program Proposal

Please mark all that apply:

- New Course
- Cross-Listing
- Shared-Resources Course
- Deactivate/Activate Course (boldface & underline as appropriate)

Revision of:  
- Number
- Title
- Credits
- Other (specify): Requirements

Department: Informatics, College of Computing and Information  
Effective Semester, Year: Fall 2012

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<tr>
<th>Course Number</th>
<th>Current:</th>
<th>New:</th>
<th>Credits:</th>
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Course Title:

Course/ Program Description to appear in Bulletin (please limit course descriptions to 50 words or less):

**IN UNDERGRADUATE BULLETIN SECTION ON MINORS:**

Financial Market Regulation: A minimum of 21 graduation credits including B ACC 211, B FIN 300, 333, 375, R PAD 236, 435, and one course from ICSI 105, I CSI 201, or other class in Computer Science approved by the Academic Program Adviser. Appropriate substitutions are also acceptable with the approval of the Academic Program Advisor. Students wishing to declare the minor in Financial Market Regulation must have an overall grade point average at the University of at least 3.25 and completed the required lower-division (100-200-level) courses with at least a 3.0 average; these classes (B ACC 211, the designated lower-division class in Computer Science, and R PAD 236) must be taken on a graded (not S/U) basis. For additional details and information on applying for admission into the minor, see Financial Market Regulation Major under the College of Computing and Information.

Prerequisites statement to be appended to description in Bulletin:

To be admitted to the major or minor, students must have an overall grade point average of 3.25. They also must have completed the lower division courses in accounting, computer science, information technology, and regulatory policy for the major (B ACC 211; I CSI 201, I CSI 105, or other course in Computer Science approved by the Academic Program Adviser; I INF 201, and R PAD 236) with an average of 3.0 (B) or better.

If S/U is to be designated as the only grading system in the course, check here:

This course is (will be) cross listed with:

This course is (will be) a shared-resources course with:

Explanation of proposal: Providing alternative choices for ICSI 201

Other departments or schools which offer similar or related courses and which have certified that this proposal does not overlap their offering:

Interim

Chair of Proposing Department

Signed: [Signature]

Date: 3-28-12

Approved by Chair(s) of Department(s) having cross-listed course(s)  
Date:  
Dean of College  
Date:  

Chair of Academic Programs Committee  
Date:  
Dean of Undergraduate or Graduate Studies  
Date:  

Signed: [Signature]

Date: 3-28-12
University at Albany – State University of New York

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Please check one: [ ] Course Proposal [ ] Program Proposal

Please mark all that apply:

- New Course
- Cross-Listing
- Shared-Resources Course
- Deactivate/Activate Course (boldface & underline as appropriate)

Department: Informatics, College of Computing and Information

Revision of: Number [ ] Description
Title [ ] Prerequisites
Credits [ ] Requirements

Other (specify):

Effective Semester, Year: Fall 2012

Course Number

Course Title:

Course/Program Description to appear in Bulletin (please limit course descriptions to 50 words or less):

Degree Requirements for the Interdisciplinary Major in Financial Market Regulation

The major requires the following courses, or appropriate substitutes approved by the program advisors.

**Business and Finance**
- B ACC 211 Financial Accounting
- B FIN 300 Financial Management
- B FIN 333 Investment Management
- B FIN 375 Money and Capital Markets

**Public Policy and Law**
- R PAD 236 Institutions and Policy in Business Regulation
- R PAD 435 Fundamentals of Securities Law
- R PAD 436 Regulation of Securities Markets

**Information Management and Data Analysis**
- I CSI 105 Computing and Information; I CSI 201 Introduction to Computer Science; or other class in Computer Science approved by the Academic Program Adviser
- I INF 201 Introduction to Information Technology
- B ITM 330 Business Information Systems & Technologies
  (Students normally will need to take A MAT 106 and A MAT 108 or A ECO 320 or other equivalent class in statistics as prerequisites for B ITM 330.)
- B ITM 331 Business Application Development

Choose One from the Following Two Courses:
- B ITM 416 Communication, Networking, and Security
- I INF/IST 423 Networking Essentials

Prerequisites statement to be appended to description in Bulletin:

To be admitted to the major or minor, students must have an overall grade point average of 3.25. They also must have completed the lower division courses in accounting, computer science, information technology, and regulatory policy for the major (B ACC 211; I CSI 201, I CSI 105, or other course in Computer Science approved by the Academic Program Adviser; I INF 201, and R PAD 236) with an average of 3.0 (B) or better.

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This course is (will be) a shared-resources course with:

Explanation of proposal: Providing alternative choices for ICSI 201

Other departments or schools which offer similar or related courses and which have certified that this proposal does not overlap their offering:

Chair of Proposing Department: ___________ Date: 3-28-12

Approved by Chair(s) of Departments having cross-listed course(s) [Please attach copies of approval memo or memo]

Date: Dean of College: Date: 3-28-12

Chair of Academic Programs Committee: Date: Dean of Undergraduate or Graduate Studies: Date:
Proposal Title: Request To Modify Requirement Of ICSI 201 In Major And Minor In Financial Market Regulation

College or School: CCI
Department: Informatics

Program Director or Sponsor: Peter A. Bloniacz
E-mail: p.bloniacz@albany.edu

Action Category: □ Program Proposal
☑ Other (describe)
Category desc.

Action Type: □ New
☑ Revision
□ Deactivation
□ Other (Describe)
Action type desc.

Does this proposal include any space resource implications?
☐ Yes
☐ No
Approximate sq. ft. needed: sq ft

Has this program been identified as a Gainful Employment Program (GEP)?
☐ Yes
☐ No

Brief Description of Proposal:
Presently students admitted to the Financial Market Regulation major or minor must (1) take ICSI201 (Introduction to Computer Science) and (2) earn a “B” or better average in BACC211, ICSI201, IINF201, and RPAD236 for admission to the major or, for admission to the minor, earn a “B” or better average in BACC211, ICSI201, and R PAD236. This requests a change in these requirements.

Instead of requiring that students take ICSI201 to fulfill a requirement in Computer Science, we are asking that students be allowed to choose among ICSI201, ICSI105, or other course in Computer Science approved by the Financial Market Regulation academic program adviser in consultation with the Department of Computer Science. The grade in the class chosen will count toward the admissions requirement.

Impact on Other Programs: List other academic and support (e.g. Library, ITS) units that may be impacted by the proposed program and describe the potential impact (e.g. on student headcount/enrollment/recruitment, faculty participation, course content in other programs). Attach letters of collaboration/support from impacted programs.

CCI expects student headcount to improve in both the Financial Market Regulation program as well as those students in the Computer Science program who are interested in this subject.

Faculty and Staff
a) Describe new faculty hiring needed during the next 3 years
b) Explain how program will be administered for the purposes of admissions, advising, course offerings, etc. Discuss the available support staff

NA
### RESOURCE IMPLICATIONS

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### Projected Capital Expenditures

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<td><strong>Total Projected Capital Expenditures</strong></td>
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### APPROVALS

**Interim Department Chair**

Peter A. Bloniarz

Date: 3-28-12

**Dean**

Peter A. Bloniarz

Date: 3-28-12

**Provost or VP**

Provost/VP Signatory

Date

**UPPC Chair**

Eric Lifshin, UPPC Chair 2011-12

Date
March 2, 2012

To: JoAnne Malatesta  
Chair, Undergraduate Academic Council

From: David McCaffrey  
Distinguished Teaching Professor, Public Administration and Policy, and Academic Adviser, Major and Minor in Financial Market Regulation (FMR) (contact person, dmccaffrey@albany.edu or 442-5282)

John Levato  
Assistant Dean, School of Business

George Berg  
Chair, Department of Computer Science

SUBJ: REQUEST TO MODIFY REQUIREMENT OF ICSI 201 IN MAJOR AND MINOR IN FINANCIAL MARKET REGULATION

Presently students admitted to the Financial Market Regulation major or minor must (1) take ICSI201 (Introduction to Computer Science) and (2) earn a “B” or better average in BACC211, ICSI201, INF201, and RPAD236 for admission to the major or, for admission to the minor, earn a “B” or better average in BACC211, ICSI201, and RPAD236. This memo requests a change in these requirements.

Instead of requiring that students take ICSI201 to fulfill a requirement in Computer Science, we are asking that students be allowed to choose among ICSI201, ICSI105, or other course in Computer Science approved by the Financial Market Regulation academic program adviser in consultation with the Department of Computer Science. The grade in the class chosen will count toward the admissions requirement.

This requested change reflects three years of experience with the ICSI201 requirement in the FMR program, the availability of a new class—ICSI105—beginning in 2010-2011, and the anticipated development of at least one new class in computer analytics in 2012-2013. The description of ICSI201 says that the class focuses on “Computer algorithms and their representation. The principle of information hiding and its relation to program block structure. File structure and access methods. The efficient use of computational resources. Program development and style.” The course is designed primarily for majors in Computer Science.

In February 2012 we contacted eight recent graduates of the Financial Market Regulation major or minor who now hold entry-level professional positions in regulatory examinations or market surveillance to discuss the ICSI201 requirement. No student identified the requirement favorably. The following passages in the emailed responses represent the pattern of views:
Graduate #1: CS1 201 was probably the most challenging class I took in my college career. I ended up with an “A” in the course, but I honestly don’t think that grade was warranted. It was thanks to a 30 point curve...My basic answer to your question is no. I do not think this class was a necessary part of the program. I do not think learning how to program Java is important in the regulatory career path (at least so far). With that being said, I do think there were some benefits from this class. But these benefits could be easily extracted and implemented into a much more focused course that really would benefit and support the students in the FMR program. I think that a student who graduates from the program needs to understand the power of a computer program and how that relates to trading and the future of trading. Understanding the full capacity a computer program has, and how it can affect the market is something very important (i.e. flash crash). But knowing how to actually write a program is futile.

Graduate #2: It was an interesting class as I have a personal interest in computers and programming. However, for my job as an examiner and from what I have seen at firms while on exams, the technical skills taught in the class have presented no advantage and I have yet to draw on any of the skills learned.

Graduate #3: For me, CS1 201 has not been useful for the FMR degree. The course is an introduction to programming in Java, which doesn’t pertain to being an Examiner at FINRA. For someone who has no background in computer programming or who doesn’t have a strong interest in the subject, CS1201 is very difficult. I think that doing well demonstrates admirable qualities in a FMR student—that they are hard-working, motivated to do well etc. However, I would either suggest a course on how computers are used in financial markets, or the option to take an ‘easier’ 100-level computer class, if possible.

We believe that students graduating with the Financial Market Regulation major or minor need to understand the basic logic and functioning of programs and how computer technology shapes regulatory functions. For Computer Science majors or minors also involved in the FMR major or minor, ICSI201 is a good option. However, we want to make available to other students the option to take ICSI105, Computing and Information, a course first taught in 2010-2011. ICSI’s course description is:

A broad introduction to computer and information sciences and related disciplines. All of these fields study various aspects of information and the modern digital computer. Among the central topics of this course, students will learn basic computer programming because understanding how computers work is a key to understanding their use across all of the disciplines in Computing and Information. The topics include what we can and cannot known through computing, interactions between technology and humans, and a series of contemporary applications of the disciplines. The course includes critical readings, multiple perspectives, formulation and defense of opinions, common themes among diverse topics, and skills and practice of teamwork.

The Department of Computer Science is developing an additional introductory course in analytics in Computer Science that likely would serve as an appropriate ICSI class for Financial
Market Regulation majors and minors. We therefore request that students be allowed to fulfill the Computer Science course requirement by taking ICSI201, ICSI105, or other course in Computer Science approved by the program’s Academic Adviser in consultation with the Department of Computer Science.

We propose that the Undergraduate Bulletin description of the Financial Market Regulation major and minor be revised as follows. A fully-modified text is printed below. Text showing the changes made follows.

**SUGGESTED MODIFICATION OF UNDERGRADUATE BULLETIN WITH ALL CHANGES MADE**

**Admission to the Major and Minor in Financial Market Regulation**

Students in the interdisciplinary major or minor in Financial Market Regulation take a designated series of courses or appropriate substitutes approved by the Academic Program Advisor; the major has a minimum of 36 credits of coursework and the minor has a minimum of 21 credits. Students should apply for admission to the Financial Market Regulation major and minor by contacting the Academic Program Adviser regarding their wish to enroll in the major or minor.

To be admitted to the major or minor, students must have an overall grade point average of 3.25. They also must have completed the lower division courses in accounting, computer science, information technology, and regulatory policy for the major (B ACC 211; I CSI 201, I CSI 105, or other course in Computer Science approved by the Academic Program Adviser; I INF 201, and R PAD 236) or for the minor (B ACC 211; I CSI 201, I CSI 105, or other course in Computer Science approved by the Academic Program Adviser; and R PAD 236) with an average of 3.0 (B) or better.

Students should apply to the major after completing a minimum of three of the four specified lower-level courses; a final decision on admission will be made only after completion of all four specified lower-level courses. Students should apply for the minor after completing at least two of the three specified lower-level classes, and a final admission decision will be made only after completion of the third. Any remaining specified lower-level classes for the major or minor must be in progress at the time of application. At the time of application, and also at admission, the student’s overall GPA must be 3.25 or better, with an average of 3.0 or better in the specified lower-level classes. Admitted students also should have completed at least 56 credits toward graduation. Students must maintain their 3.25 until at least the end of their junior year (sixth semester) in order to retain their status in the Financial Market Regulation major and minor.

Because of the requirement of a 3.0 average in specified lower-level courses, candidates for the Financial Market Regulation major must take the lower-division classes used to fulfill admissions requirements, noted above, on a graded (not S/U) basis. Similarly, candidates for the minor must take the required lower-level courses noted above on a graded basis.

While B ITM 215 (Computer Applications in Business) is not required for the Financial Market Regulation major or minor, B ITM 215 is required for certain courses in the program and for effective work in the field. Thus, students should take B ITM 215 as early as possible as part of their preparation for the major or minor in Financial Market Regulation. For additional information about the minor, see the Bulletin section 'Approved Minors.'
Degree Requirements for the Interdisciplinary Major in Financial Market Regulation

The major requires the following courses, or appropriate substitutes approved by the program advisors.

Business and Finance
B ACC 211 Financial Accounting
B FIN 300 Financial Management
B FIN 333 Investment Management
B FIN 375 Money and Capital Markets

Public Policy and Law
R PAD 236 Institutions and Policy in Business Regulation
R PAD 435 Fundamentals of Securities Law
R PAD 436 Regulation of Securities Markets

Information Management and Data Analysis
I CSI 105 Computing and Information; I CSI 201 Introduction to Computer Science; or other class in Computer Science approved by the Academic Program Adviser
I INF 201 Introduction to Information Technology
B ITM 330 Business Information Systems & Technologies
(Students normally will need to take A MAT 106 and A MAT 108 or A ECO 320 or other equivalent class in statistics as prerequisites for B ITM 330.)
B ITM 331 Business Application Development

Choose One from the Following Two Courses:
B ITM 416 Communication, Networking, and Security
I INF/IST 423 Networking Essentials

IN UNDERGRADUATE BULLETIN SECTION ON MINORS:

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SUGGESTED MODIFICATION OF UNDERGRADUATE BULLETIN SHOWING CHANGES MADE

Admission to the Major and Minor in Financial Market Regulation
Students in the interdisciplinary major or minor in Financial Market Regulation take a designated
series of courses or appropriate substitutes approved by the Academic Program Advisor; the major has a minimum of 36 credits of coursework and the minor has a minimum of 21 credits. Students should apply for admission to the Financial Market Regulation major and minor by contacting the Academic Program Adviser regarding their wish to enroll in the major or minor.

To be admitted to the major or minor, students must have an overall grade point average of 3.25. They also must have completed the lower division courses in accounting, computer science, information technology, and regulatory policy for the major (B ACC 211; I CSI 201, I CSI 105, or other course in Computer Science approved by the Academic Program Adviser; I INF 201, and R PAD 236) or for the minor (B ACC 211; I CSI 201, I CSI 105, or other course in Computer Science approved by the Academic Program Adviser; and R PAD 236) with an average of 3.0 (B) or better.

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