

# UNIVERSITY FACULTY SENATE FORMS

## Academic Program Approval

This form is a routing document for the approval of new and revised academic programs. Proposing department should complete this form. For more information, call the Faculty Senate Office at 831-2921.

Submitted by: Clinton White phone number 831-6902

Department: Accounting and MIS email address skipw@udel.edu

Date: October 28, 2014

Action: Revise MS in IS&TM  
(Example: add major/minor/concentration, delete major/minor/concentration, revise major/minor/concentration, academic unit name change, request for permanent status, policy change, etc.)

Effective term 15F  
(use format 04F, 05W)

Current degree MS  
(Example: BA, BACH, BACJ, HBA, EDD, MA, MBA, etc.)

Proposed change leads to the degree of: MS  
(Example: BA, BACH, BACJ, HBA, EDD, MA, MBA, etc.)

Proposed name: \_\_\_\_\_  
Proposed new name for revised or new major / minor / concentration / academic unit (if applicable)

### Revising or Deleting:

Undergraduate major / Concentration \_\_\_\_\_  
(Example: Applied Music – Instrumental degree BMAS)

Undergraduate minor: \_\_\_\_\_  
(Example: African Studies, Business Administration, English, Leadership, etc.)

Graduate Program Policy statement change: \_\_\_\_\_  
(Must attach your Graduate Program Policy Statement)

Graduate Program of Study: MS in IS&TM  
(Example: Animal Science: MS Animal Science: PHD Economics: MA Economics: PHD)

Graduate minor / concentration: \_\_\_\_\_

**Note: all graduate studies proposals must include an electronic copy of the Graduate Program Policy Document, highlighting the changes made to the original policy document.**

**List new courses required for the new or revised curriculum. How do they support the**

**overall program objectives of the major/minor/concentrations)?**

(Be aware that approval of the curriculum is dependent upon these courses successfully passing through the Course Challenge list. If there are no new courses enter "None")

NONE

**Explain, when appropriate, how this new/revised curriculum supports the 10 goals of undergraduate education:** <http://www.ugs.udel.edu/gened/>

**Identify other units affected by the proposed changes:**

(Attach permission from the affected units. If no other unit is affected, enter "None")

NONE

**Describe the rationale for the proposed program change(s):**

(Explain your reasons for creating, revising, or deleting the curriculum or program.)

1. Create 6 credits of electives in the degree program. The program currently is comprised of 6 credits of foundation courses, 30 required credit hours, and no electives. The change will drop the required credits to 24, and add 6 credits of electives. Total credit hours remain unchanged. This change better meets the needs of our growing number of full-time students. The following course changes are being made to accommodate the electives:
  - a. Combine content of MISY 810 and MISY 811 into one course. Currently, we require 2 Telecommunication and Networking courses, MISY 810 and 811. We are changing this to one enhanced Telecommunication and Networking course (MISY 810). The new faculty member teaching the Telecommunication and Networking series has revised the MISY 810 to include the material previously taught in the separate course.
  - b. Remove MISY 811 from the course offerings (see above course change) and replace it with a 3-credit MIS elective approved by the program advisor.
  - c. Move MISY 870 and MISY 871 to the elective category. We require a capstone sequence including attending invited speaker seminars for 2-credits (MISY 870) and a 1-credit research paper (MISY 871). The students will now take either the MISY 870 and 871 sequence or an elective approved by the program director.
2. Additional name change for MISY 830. Change the name of MISY 830 to "Business Intelligence and Analytics" to better reflect its contents and focus.
  - a. Description: Provides a managerial perspective on the use of business intelligence tools and analytics to make decisions and solve business problems. Topics include data warehousing, visual analytics, data mining, text analytics, web analytics, expert systems and knowledge management, and big data and analytics

**Program Requirements:**

(Show the new or revised curriculum as it should appear in the Course Catalog. If this is a revision, be sure to indicate the changes being made to the current curriculum and **include a side-by-side comparison** of the credit distribution before and after the proposed change.)

Current and revised MS in IS&TM curriculum

<b>Current MS in IS&amp;TM program (36 credits):</b>	<b>Proposed MS in IS&amp;TM program (36 credits):</b>
<b><u>FOUNDATION COURSES</u></b> (6 credits) (approved by program director):	<b><u>FOUNDATION COURSES</u></b> (6 credits) (approved by program director):
ACCT 800 Financial Reporting & Analysis	ACCT 800 Financial Reporting & Analysis
BUAD 831 Operations Mgmt & Mgmt Science	BUAD 831 Operations Mgmt & Mgmt Science
<b><u>CORE IS&amp;TM COURSES</u></b> (36 credits required)*:	<b><u>CORE IS&amp;TM COURSES</u></b> (36 credits required)*:
ACCT 804 Data Management (3-credits)	ACCT 804 Data Management (3-credits)

ACCT 805 Current Issues in MIS (3-credits)	ACCT 805 Current Issues in MIS (3-credits)
ACCT 806 Systems Anal & Implementation (3-credits)	ACCT 806 Systems Anal & Implementation (3-credits)
MISY 810 Telecommunications I (3-credits)	MISY 810 Telecommunications I (3-credits)
MISY 811 Telecommunications II (3-credits)	MISY 811 Telecommunications II (3-credits)
MISY 830 Decision Support & Analysis (3-credits)	MISY 830 Decision Support & Analysis (3-credits)
MISY 840 Project Management (3-credits)	MISY 840 Project Management (3-credits)
MISY 850 Security & Control (3-credits)	MISY 850 Security & Control (3-credits)
MISY 873 Managing in an IT Environment (3-credits)	MISY 873 Managing in an IT Environment (3-credits)
MISY 870 High Tech Seminar (2-credits)	
MISY 871 Strategic IT Mgmt (research paper) (1-credit)	
*Course substitutes approved by director	
	<b>ELECTIVES</b> (6 Credits) (approved by director)
	MISY 870 High Tech Seminar (2-credits)
	MISY 871 Strat IT Mgmt (research) (1-credit)
	BUAD 820 Stat Data Anal for Bus (3-credits)
	Other electives as approved by the advisor.

**ROUTING AND AUTHORIZATION:** (Please do not remove supporting documentation.)

Department Chairperson *[Signature]* Date 11-1-14

Dean of College *Rick Andrews* Deputy Deans *[Signature]* Date 12-3-14

Chairperson, College Curriculum Committee *[Signature]* Date 11/20/14

Chairperson, Senate Com. on UG or GR Studies \_\_\_\_\_ Date \_\_\_\_\_

Chairperson, Senate Coordinating Com. \_\_\_\_\_ Date \_\_\_\_\_

Secretary, Faculty Senate \_\_\_\_\_ Date \_\_\_\_\_

Date of Senate Resolution \_\_\_\_\_ Date to be Effective \_\_\_\_\_

Registrar \_\_\_\_\_ Program Code \_\_\_\_\_ Date \_\_\_\_\_

Vice Provost for Academic Affairs & International Programs \_\_\_\_\_ Date \_\_\_\_\_

Provost \_\_\_\_\_ Date \_\_\_\_\_

Board of Trustee Notification \_\_\_\_\_ Date \_\_\_\_\_

## **MS in IS&TM program and proposed changes – September 5, 2014**

1. The MS in IS&TM program is a 36-credit program requiring 2 foundation courses, which are determined based a student's background, and 10 MS courses, as follows:
  - a. ACCT 804 – Database Design
  - b. ACCT 805 – Current Issues in MIS
  - c. ACCT 806 – Systems Analysis & Implementation
  - d. MISY 810 – Telecommunications & Networks I
  - e. MISY 811 – Telecommunications & Networks II
  - f. MISY 830 – Decision Support & Analysis
  - g. MISY 840 – Project Management
  - h. MISY 850 – Security and Control
  - i. MISY 873 – IT and Organizational Effectiveness
  - j. MISY 870 – High Technology Seminars (2)
  - k. MISY 871 – MS in IS&TM Research Project (1)

When the program was designed in 2003, very few other acceptable graduate courses existed and therefore we had limited flexibility to allow students to take other courses to be able to customize their MS program and virtually all of the students were part-time. That is no longer the case.

2. **Changed environment:** The majority of our MS in IS&TM students are full-time international students with a variety of backgrounds and there are now a number of courses available to allow a student to customize their program and thereby make it more relevant to their interest and prospective employers. In addition, since they are full-time students they are taking courses 4 nights a week, with some also taking afternoon courses. As such, they have class conflicts and often cannot attend the High Tech Seminars. Also, many are finding internships and prospective employers with companies that expect them to have more in depth skills in related MIS areas; SAS programming, Security, Business Processes, Analytics, or ERP, for example. And, we are developing new courses in our department (e.g., Seminar in Business Process Modeling (first taught in Spring 2014), in the College for the FSAN program, and by other departments on campus (e.g., STAT 674 – Applied Database Management (SAS programming) and CISC 667 – Seminar in Cybersecurity), that are appropriate for our MS students. In addition, our professor with expertise in telecommunications, networks, and security, now teaching all three classes (810, 811, and 850), feels that we should be offering one in depth Telecomm & Networking course, as opposed to two, and one Security and Control course.
3. **Proposed change 1:** Combine the current 2-course sequence of MISY 810 and 811 into a single 3-credit course, to be named MISY 810, and move the unspecified credits to electives. As explained above, this will provide one in-depth Telecomm & Networking class to be followed by a Control & Security class (MISY 850).

4. **Proposed change 2:** Move the MISY 870, High Tech Seminars, and MISY 871, MS in IS&TM Research Project, to electives. As explained above, this gives students more flexibility and allows them to select a more relevant course to add to their program.
5. **Proposed change 3:** Change the name of MISY 830 to Business Intelligence and Analytics to better reflect its contents, including the new text materials.
  - a. Description: Provides a managerial perspective on the use of business intelligence tools and analytics to make decisions and solve business problems. Topics include data warehousing, visual analytics, data mining, text analytics, web analytics, expert systems and knowledge management, and big data and analytics.

**DEPARTMENT OF ACCOUNTING & MIS**  
**MS in INFORMATION SYSTEMS & TECHNOLOGY MANAGEMENT**  
**PROGRAM POLICIES**

**I. The MS in IS&TM degree program**

The Department of Accounting & MIS offers a program of study leading to the Masters of Science degree in Information Systems & Technology Management. The program offers study to outstanding candidates with backgrounds in business or a technical area such as computer science or engineering. The IS&TM program prepares students for professional careers in information systems. Students may attend on a part-time or a full-time schedule. The estimated time to completion for a full-time student is 21 months.

~~The MS in IS&TM degree is currently under review for permanent status.~~

**II. Admission requirements and procedures**

Minimum requirements for admission to the MS in IS&TM degree program are an undergraduate academic index of 2.8 overall and 3.0 in the major field of study and a combined score of 440-300 on the verbal and quantitative portions of the GRE or a combined score of 550 on the GMAT. Graduate GPA (if applicable) should be at least 3.2. Work experience, preferably in an IT-related area, is expected. A ~~paper-based~~ TOEFL IBT score of ~~at least 600~~ 100 (or 250 CTOEFL ~~computer-based or 100 IBT~~) is required for international students.

Applicants for all degree programs must submit one official transcript of all previous college records, provide a statement of objectives and interests, an essay, and have three recommendation forms completed by appropriate mentors and submitted to the University Office of Graduate Studies.

Admission to the graduate program is selective and competitive based on the number of well-qualified applicants and the limits of available faculty and facilities. Those who meet stated minimum requirements are not guaranteed admission, nor are those who fail to meet all of the requirements necessarily precluded from admission if they offer other appropriate strengths. Admission will be decided by the Graduate Coordinator, in consultation with an admission committee (composed of faculty who participate in the program). Application for fellowship, tuition scholarship, or assistantship financial aid is a part of the admission application form and is made at the time of application. Applications being considered for financial support should be completed by April 1 for fall terms and December 1 for entering in spring term. For further details, contact the department's Graduate Coordinator.

### III. Academics

General requirements for the MS in IS&TM are completion of at least 36 graduate credit hours, including attendance at "high tech" seminars (2 credit hours) and a supervised research paper (1 credit hour).

#### Specific courses

Foundation courses (minimum 6 credits, optional 7 credits)

(Students are advised upon admission which foundation courses to take depending on their background and substitutions are permitted)

<b>FOUNDATION COURSES</b> (6/7 credits) (approved by program director):	<b>FOUNDATION COURSES</b> (6 credits) (approved by program director):
ACCT 800 Financial Reporting & Analysis	ACCT 800 Financial Reporting & Analysis
BUAD 831 Operations Mgmt & Mgmt Science	BUAD 831 Operations Mgmt & Mgmt Science
<del>MISY 865.150 Seminar in Business Processes &amp; Operations Management (2 credits)</del>	
<del>MISY 865.152 Seminar in Programming I— Object-oriented (2 credits)</del>	
<del>MISY 865.154 Seminar in Marketing (2 credits)</del>	
<del>MISY 865.150 Seminar in Finance (2 credits)</del>	
<b>CORE IS&amp;TM COURSES</b> (36 credits required)*:	<b>CORE IS&amp;TM COURSES</b> (36 credits required)*:
ACCT 804 Data Management (3-credits)	ACCT 804 Data Management (3-credits)
	ACCT 805 Current Issues in MIS (3-credits)
ACCT 806 Systems Anal & Implementation (3-credits)	ACCT 806 Systems Anal & Implementation (3-credits)
<del>CPEG MISY 810 Telecommunications I (3-credits)</del> (taught by ECE)	MISY 810 Telecommunications I (3-credits)
<del>CPEG MISY 811 Telecommunications II (3-credits)</del> (taught by ECE)	
<b>Advance core courses (12 credit hours)</b>	
MISY 830 <del>Decision Support &amp; Analysis</del> (3-credits)	MISY 830 Business Intelligence & Analysis (3-credits)
MISY 840 Project Management (3-credits)	MISY 840 Project Management (3-credits)
MISY 850 Security & Control (3-credits)	MISY 850 Security & Control (3-credits)
MISY 873 Managing in an IT Environment (3-credits)	MISY 873 Managing in an IT Environment (3-credits)
<del>Capstone (3 credit hours)</del>	
MISY 870 High Tech Seminar (2-credits)	
MISY 871 Strategic IT Mgmt (research paper) (1-credit)	
*Course substitutes approved by director	
<b>Elective</b> (3 credit-hours)	<b>ELECTIVES</b> (6 Credits) (approved by director)
ACCT 805 <del>Current Issues in MIS</del> (3-credits)	
	MISY 870 High Tech Seminar (2-credits)
	MISY 871 Strat IT Mgmt (research) (1-credit)
	BUAD 820 Stat Data Anal for Bus (3-credits)
	Other electives as approved by the advisor.

TOTAL CREDIT-HOURS

36/37

**Substitutions and transfers of credit**

Students may petition the Graduate Coordinator for variance in degree requirements based on previous degree completed. This should be done in writing (email is acceptable) to the Graduate Coordinator. Permission and course substitutions will be determined by the Graduate Coordinator, in consultation with a committee (composed of faculty who participate in the program).

**English language expectation**

Students are expected to have a sufficient level of oral and written English communication skill to be successful in department coursework. Those students with an assistantship that involves teaching or research should have a sufficient level of English oral communication skill to be comfortably understood by the students they teach and the faculty member with whom they work.

**Progress towards the degree**

Students may enroll full or part-time. The Graduate Coordinator will create a recommended program for each student and students are expected to remain in contact with the Graduate Coordinator during their time in the program.

Graduate students will be evaluated in courses according to the University grading policy and must maintain a minimum GPA of 3.0 to remain in good academic standing. GPA requirements are monitored by the Office of Graduate Studies according to the Graduate Studies Academic Probation Policy.

**IV. Funding Policies/Financial aid**

The IS&TM degree program at the University of Delaware is a normally a two-year program for a full-time student. Funding is awarded to applicants and continuing students on a competitive basis.

1. Incoming students are awarded funding on the following basis:

- The availability of funded assistantships
- The quality and completeness of the student's application
- The experience and background of the student in information systems
- Adherence to Departmental and University policy

2. Continuing second year students are awarded funding on the following basis:

- The availability of funded assistantships
- Performance in the first year of a funded assistantship based on faculty evaluations
- Performance in the first year of the IS&TM program
- Adherence to Departmental and University policy

The Department does not award 3<sup>rd</sup> year funded assistantships to IS&TM students.



## **V. Departmental operations**

Upon matriculation, students are expected to provide up-to-date address, telephone, and email information to the Department of Accounting & MIS staff and to update them as necessary throughout the time they are enrolled in the IS&TM degree program. It is especially important that students activate their University of Delaware email account, and arrange for messages to the UD email account to be forwarded to email accounts with other providers (e.g. yahoo, hotmail, or Gmail), if the student uses the outside account as his/her mail email account.