

### Cover/Signature Page - Abbreviated Template

**Institution Submitting Request:** *University of Utah*

**Proposed Title:** *BS / MS Combined program in Information Systems*

**Currently Approved Title:**

**School or Division or Location:** *David Eccles School of Business*

**Department(s) or Area(s) Location:** *Operations and Information Systems*

**Recommended Classification of Instructional Programs (CIP) Code<sup>1</sup> (for new programs):** *52.1201*

**Proposed Beginning Date (for new programs):**

**Institutional Board of Trustees' Approval Date:** *3/12/2013*

**Proposal Type (check all that apply):**

<b>R401-5</b>		<b>R401-6</b>	
<i>Items submitted will be reviewed by OCHE. If there are any issues, the proposal will be returned for clarification/correction. If no issues, the proposal will be returned with a note of approval and the request will be placed on the General Consent Calendar of the next Regents' agenda.</i>		<i>Items submitted will be reviewed by OCHE. If there are any issues, the proposal will be returned for clarification/correction. If no issues, the proposal will be returned with a note of approval and the request will be placed on the General Consent Calendar of the next Regents' agenda.</i>	
4.1.5.2	<input type="checkbox"/> Minor*	6.1.1	<input type="checkbox"/> Reinstatement of Previously Suspended Program
5.1.1.1	<input type="checkbox"/> New Emphasis on an Existing Degree*	6.1.5	<input type="checkbox"/> Reinstatement of Previously Suspended Unit
5.1.2	<input type="checkbox"/> Certificate of Proficiency Not Eligible for Financial Aid		
5.1.3	<input type="checkbox"/> Out-of-Service Area Delivery of Programs		
5.1.4	<input type="checkbox"/> Name Change of Existing Programs		
	<input type="checkbox"/> Program Transfer		
5.1.5	<input type="checkbox"/> Program Restructure		
	<input type="checkbox"/> Program Consolidation		
5.1.6	<input type="checkbox"/> Program Discontinuation		
	<input type="checkbox"/> Program Suspension		
	<input type="checkbox"/> Administrative Unit Creation		
5.1.7	<input type="checkbox"/> Administrative Unit Transfer		
	<input type="checkbox"/> Administrative Unit Consolidation		
	<input type="checkbox"/> New Center		
5.1.8	<input type="checkbox"/> New Institute		
	<input type="checkbox"/> New Bureau		
5.1.9	<input type="checkbox"/> Graduate Certificate		

\*Requires "Section VI: Program Curriculum" of Abbreviated Template

**Chief Academic Officer (or Designee) Signature:**

I certify that all required institutional approvals have been obtained prior to submitting this request to the Office of the Commissioner.

  
Signature

Date: *11/7/12*

**Printed Name:** *Michael Hardman*

<sup>1</sup> CIP codes must be recommended by the submitting institution. For CIP code classifications, please see <http://nces.ed.gov/ipeds/cipcode/Default.aspx?y=55>.

**University of Utah  
Combined BS/MS Program  
In Information Systems  
March 24, 2012**

**Section 1: Request**

The Operations and Information Systems (OIS) Department in the David Eccles School of Business at the University of Utah requests permission to establish a combined BS/MS degree program in Information Systems.

**Section II: Need**

The University of Utah offers unique educational research opportunities for undergraduate students because it is a strong research institution and a technological leader in the mountain west. Many students participate in research at many levels, including undergraduate research and honors projects, participation in graduate student and faculty research projects, in guest lectures, and in discussing forefront research by leaders in their fields.

In recent years, the MS in Information Systems degree has become highly desirable for business practitioners, as advances in information technology have allowed firms to increase efficiency and make better use of resources. A combined BS/MS degree program intended to foster undergraduate research and to accelerate progress toward the MS degree is thus timely and attractive for undergraduate students interested in pursuing employment in the field. The combined degree program is intended to attract qualified undergraduate students into the graduate program early, decrease the time required to obtain graduate degrees, and involve students early in their careers in research programs.

The combined degree program described below is designed to be completed by students in five years and to culminate with simultaneous conferral of the Bachelor of Science and Master of Science degrees. Students in the combined program begin their capstone research project early and complete advanced level courses after their junior year. The following minimum requirements must be met universally:

- 1) Students must complete a minimum of 152 semester credit hours of qualified studies. A minimum of 30 semester credit hours must meet the MS requirements of the University of Utah Graduate School and the David Eccles School of Business. A minimum of 122 semester credit hours must meet the BS requirements of the IS Major.
- 2) Each interested undergraduate student must apply to the program through the Graduate Admissions Office of the David Eccles School of Business by April 1<sup>st</sup> of his or her junior year. Recommendations for admission are made by the School of Business to the Graduate School by June 1<sup>st</sup> each year. Entrance criteria for the combined BS/MS program are consistent with criteria for the traditional MSIS program.
- 3) Admitted students must submit a BS/MS program of study to the MSIS Program Director within one semester after admission.
- 4) Transfer from undergraduate to graduate status occurs after completion of 122 semester credit hours of qualified studies.
- 5) The BS and MS degrees are conferred simultaneously following completion of the program.

- 6) Students wishing to exit the combined program can apply qualified coursework toward the traditional BS and MS degree requirements without penalty, with recognition that a given course cannot be counted toward both degrees.
- 7) No student will be awarded a separate MS degree in Information Systems without satisfying all requirements for the BS degree.

#### Procedures

1. Application for admission to BS/MS program will be submitted at the end of a student's junior year. This application is processed and decisions made at the department level. Consistent with University policy, entering students must have at least a 3.0 cumulative GPA.
2. Students must be enrolled in the School of Business IS Major at the time of applying for the BS/MS degree option.
3. The student will apply for graduate status during the semester in which 122 credit hours are completed. Students will follow the regular University of Utah Graduate School application process. All university requirements for graduate admissions must be met except posting of undergraduate degree. (Note: On the referral sheet that the department returns to graduate admissions, the department will note that the student has been accepted to the combined BS/MS program. Graduate Admissions will then approve admission without the BS completed.)
4. Following admission, a supervisory committee will be established within the department during the first semester of work toward the combined degree. The entering student will select an advisory committee and prepare a program of study for completion of the BS and MS degree during first semester in the combined program.
5. A mid-program review will be conducted by the supervisory committee after 2 semesters in the program.
6. Each degree will be awarded when all work is completed. A Master's degree will **not** be awarded under this program if all requirements for the BS are not completed.
7. The Department will ensure that all requirements are met for each degree. Courses taken for the graduate degree will not be eligible for graduate credit until the requirements for both degrees are satisfied.

### **Section III: Institutional Impact**

A combined BS/MS degree will likely result in increased enrollment in the program because it will be attractive to students. Instituting this program will not necessitate changes in existing administrative structures at the University. As other similar combined BS/MS programs exist within the University, procedures are already established for such programs in reporting by the Registrar and acceptance into the program by the Graduate School prior to completion of the BS degree. No changes in faculty, staff, or physical facilities will be required. Further, no student will be adversely affected by this change as any student can complete his or her BS under the existing program.

### **Section IV: Finances**

No costs are anticipated to result from this change. If enrollments in the MSIS program increase as a result of instituting this program, then the cost per degree will decrease.

## **Supplemental Information for Combined BS/MS Information Systems Degree**

### **Additional Information Explaining Program Need:**

Current degree requirements (122 semester credit hours) for the BS degree in information systems provide a solid foundation for an MS degree student (30 additional semester credit hours). While there is no reduction in credit hours associated with the combined degree program (152 total credit hours), the program will provide several notable benefits to information systems students at the University of Utah.

1. The combined degree program will allow qualified students in the BS degree program to begin taking graduate level classes towards the MS degree while still enrolled in the BS degree program. Prior experience has shown that employers aggressively pursue MS students for internship opportunities. The combined program strategy may help to increase overall internship placements for the students.
2. A combined BS/MS degree program will encourage more BS students to enroll in the MS program. Enrolling undergraduate students in the combined program and giving them opportunities to interact with the MS students also represents a unique opportunity for the undergraduate students to be mentored by more senior graduate students, many of whom have more than five years of work experience.
3. The proposed program will allow the department to retain high quality undergraduate students
4. The combined program will allow the University of Utah to compete more aggressively with local and regional IS/MSIS programs who are already offering a 3/2 format to their students.

### **Additional Information Explaining Procedures for Application and Admission:**

1. Application for admission to BS/MS program will be submitted at the end of a student's junior year.
2. Application process, requirements and evaluation will be consistent with the criteria for the traditional MSIS program as follows:
  - Minimum 3.0 cumulative GPA
  - GMAT exam
  - Two letters of recommendation
  - Essay explaining why the student is applying for co-terminal program
  - Resume and extracurricular activities
  - Graduate School online application with fee

### **Other Admission Requirements:**

- All application processing and recommendations for admission decisions are made at the David Eccles School of Business department level and under the authority of the IS Program Director responsible for both the IS undergraduate major and the MSIS program.
- Students must be enrolled in the School of Business IS major at the time of applying for the BS/MS degree option.
- All university requirements for graduate admissions must be met except posting of undergraduate degree.

- Recommendations for admission are made by the School of Business to the Graduate School by June 1<sup>st</sup> each year.

## **CURRICULUM SUMMARY (IS MAJOR AND MSIS PROGRAM)**

Please note that there are no proposed changes to the undergraduate or graduate curriculum as part of the BS/MS combined IS degree proposal.

### **Undergraduate Curriculum for IS Majors (122 Credit Minimum)**

#### General Education Requirements (24 – 26 credits)

- American Institutions (3)
- Writing (3)
- \*Quantitative Reasoning (3) (*Satisfied by pre-Business or Upper Division Business*)
- Fine Arts (6)
- Humanities (6)
- Science (6-8)
- \*Social and Behavioral Science (6) (*Waived for Business Students*)

#### University of Utah Bachelor Degree Requirements (3 or 4-16 Credits)

- Communication/Writing (3) (*Satisfied by pre-Business or Upper Division Business*)
- Diversity (3)
- International (3) (*Satisfied by pre-Business or Upper Division Business*)
- B.S. Quantitative Intensive (6) (*Satisfied by pre-Business or Upper Division Business*)
- B.A. Foreign Language (4-16)

#### Pre-Business Core (18 Credits)

- ACCTG 2600: Survey of Accounting I (3)
- BUS 1050: Foundations of Business (3)
- ECON 2010: Microeconomics (3)
- IS 2010: Computer Essentials (3)
- MATH 1090: College Algebra (3)
- OIS 2340: Business Statistics (3)

#### Upper Division Core (36 Credits)

- Business and Humanities (3)
- Business and Social Science (3)
- Business and Professional Communication (3) OR Business Writing (3)
- ACCTG: Survey of Accounting II (3)
- FINAN 3040: Financial Management (3)
- FINAN 3050: Intro to Investments (3)
- IS 4410: Information Systems (3)
- MGT 3410: Business Law (3)

- MGT 3680: Human Behavior in Organizations (3)
- MKTG 3010: Principles of Marketing (3)
- OIS 3660: Operations Management (3)
- MGT 5700: Strategic Management (3)
- 

#### Information Systems Majors (30 Credits)

- OIS 3440
- IS 4415: Data Structures and Java (3)
- IS 4420: Database Fundamentals (3)
- IS 4430: Process Analysis & IS Project Management (3)
- IS 4440: Networking & Servers (3)
- IS 4460: Web Based Applications (3)
- IS 4470: Telecommunications & Security (3) OR IS 4480: Data Warehouse Design & Implementation (3)
- OIS 5620: Global Supply Chain Management (3)
- Any IR Course (3)

#### Electives (11+ Credits)

### **MSIS Curriculum (30 Credit Minimum)**

#### Core (18 Credits)

- IS 6420: Database Theory and Design (3)
- IS 6410: Information Systems Analysis and Design (3)
- IS 6640: Networking and Servers (3)
- OIS 6660: Project Management (3)
- IS 6471: Emerging Web Technologies and Strategies (3)
- IS 6596: Capstone Project – Analysis and Planning (1.5)
- IS 6597: Capstone Project – Execution and Presentation (1.5)

#### Electives (12 Credits)

##### Web/Development

- IS 6850: Mobile Applications (3)
- IS 6615: Data Structure and Java (3)
- IS 6465: Web Based Applications (3)
- OIS 6500: VBA for Excel (3)

##### Security

- IS 6570: IT Security (3)
- IS 6571: IT Forensics (3)
- ACCTG 6520: IT Risks and Controls (3)

##### Database Management and Analytics

- IS 6480: Data Warehousing (3)
- IS 6484: Advanced Data Management (3)
- IS 6580: Web Analytics (3)

- OIS 6040: Data Analysis and Decision Making (1.5)
- OIS 6482: Introduction to Data Mining (3)

#### Operations Management

- OIS 6450: Business Process Simulation (3)
- OIS 6425: Six Sigma for Managers (3)
- OIS 6610: Practical Management Science (3)
- OIS 6620: Supply Chain Management (1.5)