

## **Proposal for Concurrent Degree Program: Bachelor of Science in Management Information Systems and Business Analytics / Master of Science in Information Systems**

### **Name of the programs/Degrees:**

The Department of Information Systems and Business Analytics at the Ivy College of Business seeks approval for a concurrent Master of Science in Information Systems (MSIS) degree for undergraduate students in the Bachelor of Science in Management Information Systems (MIS) and the Bachelor of Science in Business Analytics (BUSAN).

### **Name of the department(s) which administer(s) the program:**

Department of Information Systems and Business Analytics, Ivy College of Business

### **Rationale for the concurrent degree program:**

The Master of Science in Information Systems program is a popular option for high-achieving undergraduate students seeking further specialization in the field of information systems. In addition, the program's STEM-designation makes it particularly attractive to international students interested in the three-year OPT. While a wide variety of business and non-business majors are enrolled in the Master of Science in Information Systems degree, Management Information Systems and Business Analytics graduates are an especially well-fitting demographic to enroll in the Master of Science in Information Systems program.

Ivy recruiters and the graduate staff routinely receive inquiries from Ivy undergraduate students wanting to get a head start on the Master of Science in Information Systems degree program while completing their undergraduate degree.

### **The concurrent degree benefits students in multiple ways:**

1. There is great industry demand for specialized knowledge in information systems management. 100% of our Master of Science in Information Systems graduates are employed six months after graduation. The average salary of these graduates is \$74,103. By comparison, undergraduate management information systems and business analytics graduates have an average starting salary of \$62,477 and \$ 61,045 respectively (*preliminary, confidential*).
2. Credit sharing with the undergraduate degree decreases the overall credit burden by six graduate credits making the graduate degree more economical (24 stand-alone credits).
3. The ability to start the degree while completing undergraduate coursework might shorten the overall time to completion. Given the sometimes-significant amount of transfer coursework that undergraduate students bring in from high school, students might be able to attain the additional credential in one or two semesters of additional coursework. In the sample plan attached to our proposal, students are able to finish their graduate degree by taking 12 credits of graduate coursework per semester and one undergraduate elective. Realistically, many students, will only have graduate coursework left in the last two semesters of the sample plan. Given the variety and frequency of courses offered in the MSIS program, students wanting to finish the program in one to two additional semesters will be able to do so. This is in line with our other 30-credit concurrent program, the Master of Accounting, where students graduate in two semesters, on average.

Employment outcomes, credit sharing, and potentially lower time to completion make a strong case for offering this concurrent plan to our students.

### **Admission procedures and requirements**

The concurrent Master of Science in Information Systems is designed to be completed in two semesters. In the first four years, students' progress through their prescribed course requirements. Their final year is comprised of the remaining undergraduate course work and graduate-level MSIS classes.

The appendixes illustrate a sample two-semester study plan for the MSIS concurrent program for management information systems and business analytics undergraduate students under the 2021-2022 Catalog. The variety and frequency of courses offered in the MSIS program, allow students to finish the program in two semesters, if they so desire. While the program can be completed in two semesters, the actual time to completion may be longer depending upon semester course loads, coops/internships, study abroad experiences.

Degree requirements for the undergraduate degree in Management Information Systems and Business Analytics and the Master of Science in Information Systems are unchanged in the proposed concurrent degree. The bachelor of science in Management Information Systems and Business Analytics and the Master of Science in Information Systems require a minimum of 122 credit hours, and 30 credit hours, respectively. The concurrent program requires a minimum of 146 credit hours including six credit hours applied toward both the undergraduate in Management Information Systems and Business Analytics and the Master of Science in Information Systems degrees.

The Master of Science in Information Systems is a rigorous 2-semester program, and admission is selective. Each candidate is evaluated first based on transcripts, resume, and the student submitted essays. In addition, applicants must also satisfy the Graduate College admissions requirements: English Placement Test and a 3.00 minimum GPA.

Management Information Systems and Business Analytics undergraduate students interested in the concurrent degree program must apply to the Master of Science in Information Systems degree no later than July 1 the summer prior to their senior year. Master of Science in Information Systems admission is considered for fall Semester and Spring entry.

### **The following application materials are required:**

Application for an ISU Undergraduate Student Wishing to Pursue a Concurrent Graduate Degree

- Official transcripts
- Letters of recommendation (2)
- Essays (1)
- Resume

### **Financial Assistance**

Depending upon funding availability, scholarships may be available to admitted Master of Science in Information Systems students who meet the eligibility requirements. Graduate assistantships are extremely competitive but may be awarded to highly qualified students in the fifth year of concurrent degree program.

**Expected enrollment**

40 students annually.

**Proposal Contact**

Dr. Rui (Ray) Chen

Director of Graduate Education for the Master of Science in Information Systems, Ivy College of Business

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Dr. Valentina Salotti

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## Academic Program Approval Voting Record

This document is to be appended as the last page of the proposal for any new or revised academic program to record the successive votes of approval as the proposal moves through its required review and approval steps. Consult Faculty Handbook Section 10.8 or the Faculty Senate Curriculum Committee website for information regarding Committee review and voting requirements for each action.

Curricular Action: (check appropriate boxes below)

1.  New Program     Name Change     Discontinuation     Concurrent Degree for: MIS  
BUSAN and MSIS

2.  Undergraduate Major    Graduate Major     Undergraduate Minor    Graduate Minor  
 Undergraduate Certificate             Graduate Certificate             Other: Dual-Degree

3. Name of Proposed Change: Concurrent MSIS with BUSAN and MIS

4. Name of Contact Person: Valentina Salotti e-mail address: [vsalotti@iastate.edu](mailto:vsalotti@iastate.edu)

5. Primary College: Ivy College of Business Secondary College:

6. Involved Department(s): Business Administration, Information System and Business Analytics,  
Ivy College of Business

### Voting record for this curricular action:

Voting Body	Votes			Date of Vote
	For	Against	Abstain	
ISBA (Information Systems & Business Analytics) Curriculum Committee	17	1	0	8/19/2022
College Curriculum Committee	6	0	0	9/26/2022
College Approval Vote	81	3	0	10/21/2022
Graduate Council				

**IOWA STATE UNIVERSITY**  
**Ivy College of Business**

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1420 Gerdin Business Building  
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[ivybusiness.iastate.edu/masters](http://ivybusiness.iastate.edu/masters)

BS BU AN\_MSIS Concurrent Program Summary

Semester 1: Fall	Credits	Semester 2: Spring	Credits
BUSAD 102/103: Orientation/Business Learning Team	1	ECON 102: Principles of Macroeconomics	3
ECON 101: Principles of Microeconomics	3	STAT 226: Introduction to Business Statistics I	3
COM S 113: Intro to Spreadsheets and Databases	3	PHIL 230: Moral Theory and Practice	3
ENGL 150: Critical Thinking and Communication	3	ACCT 284: Financial Accounting	3
MATH 150: Discrete Math for Business	3	INT'L/GLOBAL: Select from Approved List	3
LIB 160: Introduction to College Level Research	1	BUSAD 203: Professional Development in Business	1
<b>TOTAL</b>	<b>14</b>	<b>TOTAL</b>	<b>16</b>
Semester 3: Fall	Credits	Semester 4: Spring	Credits
ACCT 285 (CORE): Managerial Accounting	3	MIS 301 (CORE): Management Information Systems	3
ACCT 301 (CORE): The Accounting Cycle (if taking ACCT 384)	1	STAT 326: Introduction to Business Statistics II	3
DS 201: Introduction to Data Science	3	SP CM 212: Fundamentals of Public Speaking	3
MATH 151: Calculus for Business	3	NATURAL SCIENCE: Select from Approved List	3
ENGL 250: Written, Oral, Visual & Electronic Comp.	3	BUSINESS CORE: Select from Business Core List	3
HUM/SOCIAL SCI: Select from Approved List	3		
<b>TOTAL</b>	<b>15-16</b>	<b>TOTAL</b>	<b>15</b>
Semester 5: Fall	Credits	Semester 6: Spring	Credits
MIS 320 or ACCT 384: Database Mgmt Sys. OR Acct. Infor Sys. & Analy.	3	MIS 436: Introduction to Business Analytics	3
BUSINESS CORE: Select from Business Core List	3	BUSINESS CORE: Select from Business Core List	3
BUSINESS CORE: Select from Business Core List	3	BUSINESS CORE: Select from Business Core List	3
ACCT 215: Legal Environment of Business	3	GLOBAL: Select from Approved List	3
US Diversity/H-SS: Select from Approved List	3	ENGL 302: Business Communication	3
ELECTIVE (1 cr if taking ACCT 301, 2 crs if not)	1-2		
<b>TOTAL</b>	<b>16-17</b>	<b>TOTAL</b>	<b>15</b>

**Concurrent B.S. Business Analytics and Master of Information Systems  
Program Plan**

*Draft as of 6-13-22*

<b>Semester 7: Fall</b>	<b>Credits</b>	<b>Semester 8: Spring (Apply for MSIS)</b>	<b>Credits</b>
MIS 446: Advanced Business Analytics	3	MGMT 478: Strategic Management	3
BUSINESS CORE: Select from Business Core List	3	ELECTIVE	9
BU AN Elective	3		
HUM/SOCIAL SCI: Select from Approved List	3		
<b>TOTAL</b>	<b>12</b>	<b>TOTAL</b>	<b>12</b>
<b>Semester 9: Fall (Begin concurrent program)</b>	<b>Credits</b>	<b>Semester 10: Spring</b>	<b>Credits</b>
BU AN 400-level Elective	3	BU AN 400-level Elective	3
MSIS Core: MIS 501	3	MSIS Choice: MIS 538	3
MSIS Choice: MIS 536	3	MSIS Elective	3
MSIS Choice: MIS 537	3	MSIS Elective	3
MSIS Elective	3	MIS Core: MIS 599	3
<b>TOTAL</b>	<b>15</b>	<b>TOTAL</b>	<b>15</b>
<b>Program Notes</b>			
<b>BS BU AN_MSIS Concurrent Program Summary</b>	<b>Credits</b>		
BS BU AN	116		
MSIS Core	6		
MSIS Choice	9		
MSIS Elective	9		
BS BU AN/MBAN shared credit	6		
<b>TOTAL</b>	<b>146</b>		
<i>MSIS is a STEM designated program</i>			
<i>Optional Practical Training (OPT) work permit for up to 36 months after graduation</i>			

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BS MIS/MSIS Concurrent Program Summary

Semester 1: Fall	Credits	Semester 2: Spring	Credits
BUSAD 102/103: Orientation/Business Learning Team	1	ECON 102: Principles of Macroeconomics	3
ECON 101: Principles of Microeconomics	3	STAT 226: Introduction to Business Statistics I	3
COM S 113: Intro to Spreadsheets and Databases	3	PHIL 230: Moral Theory and Practice	3
ENGL 150: Critical Thinking and Communication	3	ACCT 284: Financial Accounting	3
MATH 150: Discrete Math for Business	3	INT'L/GLOBAL: Select from Approved List	3
LIB 160: Introduction to College Level Research	1	BUSAD 203: Professional Development in Business	1
<b>TOTAL</b>	<b>14</b>	<b>TOTAL</b>	<b>16</b>
Semester 3: Fall	Credits	Semester 4: Spring	Credits
ACCT 285 (CORE): Managerial Accounting	3	MIS 307: Intermediate Business Programming	3
MIS 301 (CORE): Management Information Systems	3	SP CM 212 or 312: Fundamentals of Public Speaking	3
MIS 207: Fund. of Computer Programming	3	NATURAL SCIENCE: Select from Approved List	3
MATH 151: Calculus for Business	3	HUM/SOCIAL SCI: Select from Approved List	3
ENGL 250: Written, Oral, Visual & Electronic Comp.	3	Elective	3
<b>TOTAL</b>	<b>15</b>	<b>TOTAL</b>	<b>15</b>
Semester 5: Fall	Credits	Semester 6: Spring	Credits
MIS 310: Information System Analysis	3	MIS 320: Database Management Systems	3
BUSINESS CORE: Select from Business Core List	3	MIS 340: Project Management	3
BUSINESS CORE: Select from Business Core List	3	BUSINESS CORE: Select from Business Core List	3
ACCT 215: Legal Environment of Business	3	BUSINESS CORE: Select from Business Core List	3
US Diversity	3	ENGL 302: Business Communication	3
<b>TOTAL</b>	<b>15</b>	<b>TOTAL</b>	<b>15</b>
Semester 7: Fall	Credits	Semester 8: Spring ( <i>Apply for MSIS</i> )	Credits

**Concurrent B.S. Management Information Systems and Master of Information Systems Program  
Program Plan**

*Draft as of 6-13-22*

HUM/SOCIAL SCI: Select from Approved List	3	HUM/SOCIAL SCI: Select from Approved List	3
GLOBAL: Select from Approved List	3	MGMT 478: Strategic Management	3
BUSINESS CORE: Select from Business Core List	3	ELECTIVE	3
BUSINESS CORE: Select from Business Core List	3	ELECTIVE	3-5
ELECTIVE	2		
<b>TOTAL</b>	<b>14</b>	<b>TOTAL</b>	<b>12-14</b>
<b>Semester 9: Fall</b> ( <i>Begin concurrent program</i> )		<b>Semester 10: Spring</b>	
	<b>Credits</b>		<b>Credits</b>
MIS 400-level Elective	3	MSIS Choice: MIS 538: Business Process Systems	3
MSIS CORE: MIS 501: Information Systems	3	MSIS CORE: MIS 599: Creative Component	3
MSIS Choice: MIS 536: Business Analytics Foundation	3	MIS 400-level Elective	3
MSIS Choice: MIS 533: Data Management	3	MSIS Elective	3
MSIS Elective	3	MSIS Elective	3
<b>TOTAL</b>	<b>15</b>	<b>TOTAL</b>	<b>15</b>
<b>Program Notes</b>			
<b>BS MIS/MSIS Concurrent Program Summary</b>		<b>Credits</b>	
BS MIS	116		
MSIS Core	6		
MSIS Choice	9		
MSIS Electives	9		
BS MIS/MSIS shared credit	6		
<b>TOTAL</b>	<b>146</b>		
<i>Optional Thesis includes 6 credits of MIS 699, taking total credits to 149 cr. Students pursuing thesis option must petition to waive MIS 599.</i>			
<i>MSIS is a STEM designated program</i>			
<i>Optional Practical Training (OPT) work permit for up to 36 months after graduation</i>			