

FACULTY AGENDA ITEM

Date: 3/16/2020

Submitted by: Bruce Mechtly x 1160

SUBJECT: *B.S. in Computer Information Sciences with concentration in Data Science*

Description:

Computer Information Sciences Core - 13 hrs
CM111 Intro to Structured Programming (4)
CM231 Computer Organization/Assembler (3)
CM245 Contemp Programming Methods (3)
CM261 Networked Systems I (3)
Computer Information Sciences Required - 21 hrs
CM307 Data Structures & Algorithmic Analysis (3)
CM322 Operating Systems (3)
Either CM331 Computational Intelligence (3)
or CM332 Data Mining (3)
CM333 Software Engineering (3)
CM334 Modeling with VBA/Excel (3)
CM336 Database Management Systems (3)
CM465 CIS Capstone Project (3)

Approved CM Electives - 12 hrs

These courses should be selected in consultation with a departmental advisor. A minimum of 6 hours must be upper division.

Correlated - 46 hrs

PH220 Logic (3)
EC200 Princ of Microeconomics (3)
EC201 Princ of Macroeconomics (3)
Either BU342 Organization and Management (3)
or BU346 Organizational Behavior (3)
EN208 Business/Technical Writing (3)
CN150 Public Speaking (3)
Either CN340 Professional Interviewing (3)
or CN341 Persuasive Speaking (3)
MA140 Statistics (3)
MA151 Calculus I (5)
MA152 Calculus II (5)
MA206 Discrete Math - Computing (3)
MA301 Linear Algebra (3)
MA346 Regression Analysis (3)
MA384 Theory of Interest (3)

Additional Bachelor of Science Requirements

Students must also meet the Bachelor of Science University Requirements. A 30-hour concentration in the Division of Natural Sciences and Mathematics is required and must be approved by the department chairperson. At least 20 of these hours must be selected from one discipline. Transfer students must complete at least nine upper division hours in computer information sciences from Washburn University.

Rationale:

Data Science degrees are becoming popular in academic institutions across the country. In conversations with the Department of Math & Statistics we decided we should offer such a program.

Financial Implications:

None

Proposed Effective Date: *Fall 2020*

Request for Action: *Approval by Academic Affairs, Faculty Senate, General Faculty, and WUBOR.*

Approved by: *AAC on date 3/23/2020*

FAC on date

Faculty Senate on date

Attachments Yes No

COLLEGE OF ARTS AND SCIENCES NEW PROGRAM REVIEW FORM

	Chair's Signature	Recommendation	Review Date
Department	<u>Bruce Mechtly</u>	<u>Approve</u>	<u>2019-03-27</u>
Division	<u>Seid Adem</u>	<u>Approve</u>	<u>2019-09-13</u>
Dept. of Educ.	<u>Cherry Steffen</u>	<u>Approve</u>	<u>2019-11-04</u>
<small>(If relates to teacher certification program.)</small>			
Dean	<u>Laura Stephenson</u>	<u>Approve</u>	<u>2020-01-23</u>
Curriculum Committee	<u>Kerry Wynn</u>	<u>Approve</u>	<u>2020-01-28</u>
Accepted by CFC	<u>Michaela Saunders</u>	<u>Approve</u>	<u>2020-02-04</u>
CAS Faculty	_____	_____	_____

Approved By: **Faculty Senate** _____ **University Faculty** _____ **WU Board of Regents** _____

1. Title of Program.

Bachelor of Science in Computer Information Science with a Concentration in Data Science (CIP: 52.1301)

2. Rationale for offering this program.

Data Science degrees are becoming popular in academic institutions across the country. In conversations with the Department of Math & Statistics we decided we should offer such a program.

3. Exact proposed catalog description.

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4. List any financial implications.

None.

5. Are any other departments affected by this new program? Yes

The Math & Statistics Department has committed to teaching MA301, MA346 & MA384 regularly enough to support this program.

Department
New Program Name

Program Name **Bachelor of Science in Computer Information Science with a Concentr**

	(e.g., FY13, FY14, etc.)		
Revenue:	Year 0 - Preparation	Year 1	Year 2
		# Students	# Cr Hrs
Est. Students/Cr Hrs	0	3	6
Total Credit Hours	0	90	180
Tuition Rate		281	281
Other Revenue Sources			
Total Revenue	0	\$25,290	\$50,580

Ongoing Expenses:	Year 0 - Preparation	Year 1	FTE	Year 2
1 st Faculty Member				
Benefits (25%)				
2nd Faculty Member				
Benefits (25%)				
3rd Faculty Member				
Benefits (25%)				
(Continue to add as needed)				
Secretary				
Benefits (25%)				
Adjunct Faculty				
Student stipends				
Supplies				
Marketing				
Travel				
Online Course Development				
Professional Development				
Accreditation/Membership				
Support Materials				
Total Expenses	-	-		-

Total Net Revenue	\$ -	\$ 25,290	\$ 50,580
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One-time Startup Costs	Year 0 - Preparation	Year 1	Year 2
Furniture			
Office Equipment			
Computer/Software			
Other Electronic Hardware			
Renovation			
Program Equipment			
Initial Accreditation Costs			
Program Development			
Membership			
Release Time to Develop			

Department
New Program Name

Consultant
Site Visit
Inservice/Preservice Prep

Footnotes: No new faculty needed. We will use existing CM and MA courses that are

Department
New Program Name

ation in Data Science

# Cr Hrs	Year 3 # Students	# Cr Hrs	Year 4 # Students	# Cr Hrs	Year 5 # Students	# Cr Hrs
	9		12		12	
	270		360		360	
	281		281		281	
\$75,870		\$101,160		\$101,160		

FTE	Year 3	FTE	Year 4	FTE	Year 5	FTE
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-	-	-
\$ 75,870	\$ 101,160	\$ 101,160
Year 3	Year 4	Year 5

Department
New Program Name

is already taught regularly. We will use existing facilities.