

 FLORIDA ATLANTIC UNIVERSITY	NEW/CHANGE PROGRAM REQUEST Graduate Programs		UGPC Approval _____ UFS Approval _____ Banner Posted _____ Catalog _____
	Department CEECS College Engineering and Computer Science		
Program Name Big Data Analytics Graduate Certificate		<input type="checkbox"/> New Program <input checked="" type="checkbox"/> Change Program	Effective Date (TERM & YEAR) Spring 2020
Please explain the requested change(s) and offer rationale below or on an attachment Add the course CAP 6640 to the list of CS Data Analytics Courses in the Big Data Analytics Graduate Certificate.			
Faculty Contact/Email/Phone Val Aalo / aalo@fau.edu / 561-297-3485		Consult and list departments that may be affected by the change(s) and attach documentation College of Business / ITOM	
Approved by Department Chair _____ College Curriculum Chair _____ College Dean _____ UGPC Chair _____ UGC Chair _____ Graduate College Dean _____ UFS President _____ Provost _____			Date 4/15/2019 4/15/19 4/16/2019 5/14/19 8-14-19

Email this form and attachments to UGPC@fau.edu one week before the UGPC meeting so that materials may be viewed on the UGPC website prior to the meeting.

GRADUATE COLLEGE

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Big Data Analytics Graduate Certificate

The digital age is here to stay. Organizations now own and have access to unfathomable amounts of data. New technologies and efforts are needed to move on to the next phase of the digital revolution - the data revolution. To provide students with the knowledge necessary in this age of Big Data, the Department of Computer and Electrical Engineering and Computer Science (CEECS) and the Department of Information Technology and Operations Management (ITOM) have jointly designed the Big Data Analytics graduate certificate. This 12-credit certificate allows graduate students to expand their knowledge and skills in the concepts, technologies, and tools of business intelligence, data analytics and business analytics and be recognized for their achievement. The certificate program has two tracks: Computer Science (CS) and Business (BU).

Tracks

CS Track: The Big Data Analytics certificate with a track in Computer Science will be granted to a student who completes three 3-credit courses from the CS Data Analytics course list and one 3-credit course from the ITOM Business Analytics course list.

BU Track: The Big Data Analytics certificate with a track in Business will be granted to a student who completes three 3-credit courses from the ITOM Business Analytics course list and one 3-credit course from the CS Data Analytics course list.

Admission

CS Track: Open to students who have a B.S. degree in Computer Science or in a related field of science or engineering and a GPA of at least 3.0. Students must satisfy the prerequisites for each course in the program. All four courses must be completed with a GPA of 3.0 or better. All course materials are in English; all international students must demonstrate proficiency in English to enter the program.

BU Track: Open to students who have a bachelor's degree in Business or in a related field and a GPA of at least 3.0. Students must satisfy the prerequisites for each course in the program. All four courses must be completed with a GPA of 3.0 or better. All course materials are in English; all international students must demonstrate proficiency in English to enter the program.

Big Data Analytics Courses by Track

CS Data Analytics Courses (Select three from this list and one from the list of ITOM courses.)		
Introduction to Neural Networks	CAP 5615	3
Social Networks and Big Data Analytics	CAP 6315	3
Data Mining for Bioinformatics	CAP 6546	3
Data Mining and Machine Learning	CAP 6673	3
Information Retrieval	CAP 6776	3
Web Mining	CAP 6777	3
Advanced Data Mining and Machine Learning	CAP 6778	3
Big Data Analytics with Hadoop	CAP 6780	3
Computer Performance Modeling	CEN 6405	3
Deep Learning	CAP 6619	3
Computational Advertising and Real-Time Data Analytics	CAP 6807	3
<u>Natural Language Processing</u>	<u>CAP 6640</u>	<u>3</u>
ITOM Business Analytics Courses (Select three from this list and one from the list of CS courses.)		
Data Mining and Predictive Analytics	ISM 6136	3
Database Management Systems	ISM 6217	3
Introduction to Business Analytics and Big Data	ISM 6404	3

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Advanced Business Analytics	ISM 6405	3
Social Media and Web Analytics	ISM 6555	3
Data Analysis for Managers	QMB 6603	3

From: Tamara Dinev
Sent: Monday, April 15, 2019 11:11 AM
To: Mihaela Cardei
Cc: Valentine Aalo
Subject: RE: Big Data Analytics Certificate & MSITM programs

Dear Dr. Cardei:

ITOM approves the change.

Best Regards:

Tamara

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Tamara Dinev, Ph.D., Department Chair and Professor
Dean's Distinguished Research Fellow
Department of Information Technology and Operations Management, FL 219
College of Business, Florida Atlantic University
Boca Raton, Florida 33431
tel. (561) 297-3181, email: tdinev@fau.edu
Google Scholar: <https://scholar.google.com/citations?user=YH8QZ-YAAAAJ&hl=en>

From: Mihaela Cardei <mcardei@fau.edu>
Sent: Monday, April 15, 2019 10:51 AM
To: Tamara Dinev <tdinev@fau.edu>
Cc: Valentine Aalo <aalo@fau.edu>
Subject: Big Data Analytics Certificate & MSITM programs

Dear Dr. Dinev,

CEECS department is proposing to add new courses to the group of CS courses, for the Big Data Analytics Certificate & MSITM program. Please see attached the catalog changes.

Please let me know if you approve.

Thank you,
Mihaela