TATI	NEW/CHANGE PROGR	RAM REOUEST	UGPC Approval
	•	_	UFS Approval
- 1020	Graduate Programs		Banner
FLORIDA ATLANTIC	Department Computer and Electrical Engineering and Computer Science  College Engineering and Computer Science		Catalog
UNIVERSITY			
Program Name		New Program*	Effective Date (TERM & YEAR)
MS in Data Scie	nce and Analytics	<b>✓</b> Change Program*	Fall 2021
Please explain	the requested change(s) and offer r	ationale below or on an	attachment.
Two courses are	e added as electives: CAP 6635 Artificia	I Intelligence and CAP 662	9 Reinforcement Learning.
*All new programs	and changes to existing programs must be acco	ompanied by a catalog entry sho	owing the new or proposed changes
Faculty Contact/Email/Phone		_	nents that may be affected by
Hanqi Zhuang, zhuang@fau.edu, 561-297-3413		the change(s) and attach documentation  Mathematical Sciences, Political Science, ITOM	
Approved by	Digitally	I / signed by Hanqi Zhuang	Date
Department Chair	Hally Zilually Date: 20	020.12.09 14:02:41 -05'00'	
College Curriculu	Francisco Presuel-Moreno Digital	ly signed by Francisco Presuel-Moreno =Francisco Presuel-Moreno, o=Florida Atlantic University, ou=Ocean and Mechanical ering, email=freesuel@flauedu, c=US 020.12.09 18:26:54-05'00'	
College Dean  Carder Dearing Conference of the C			12/10/2020

Email this form and attachments to <a href="UGPC@fau.edu">UGPC@fau.edu</a> 10 days before the UGPC meeting.

UGPC Chair -

**UFS** President

Graduate College Dean

UGC Chair

Provost

## Master of Science with Major in Data Science and Analytics

Electives Table		
Business Analytics		
Data Mining and Predictive Analytics	ISM 6136	3
Database Management Systems	ISM 6217	3
Introduction to Business Analytics and Big Data	ISM 6404	3
Advanced Business Analytics	ISM 6405	3
Social Media and Web Analytics	ISM 6555	3
Data Management and Analysis with Excel	QMB 6303	3
Data Analysis for Managers	QMB 6603	3
Database and Cloud Computing		
Multiprocessor Architecture	CDA 6132	3
Cloud Computing	CEN 5086	3
New Directions in Database Systems	COP 6726	3
Theory and Implementation of Database Systems	COP 6731	3
Database Management Systems	ISM 6217	3
Data Mining and Machine Learning	·	
Introduction to Neural Networks	CAP 5615	3
Social Networks and Big Data Analytics	CAP 6315	3
Data Mining for Bioinformatics	CAP 6546	3
Machine Learning for Computer Vision	CAP 6618	3
Deep Learning	CAP 6619	3
Reinforcement Learning	CAP 6629	<u>3</u>
Artificial Intelligence	CAP 6635	<u>3</u>
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
Computational Advertising and Real-Time Analytics	CAP 6807	3
Computer Performance Modeling	CEN 6405	3
Data Mining and Predictive Analytics	ISM 6136	3
Data Security and Privacy		
Computer Data Security	CIS 6370	3
Cyber Security: Measurement and Data Analysis	CTS 6319	3
Management of Information Assurance and Security	ISM 6328	3
Introduction to Cryptology and Information Security	MAD 5474	3
Cryptanalysis	MAD 6478	3
Quantum Mechanics 2	PHY 6646	3

Photogrammetry and Aerial Photography Interpretation         GIS 6028C         3           LiDAR Remote Sensing and Applications         GIS 6032C         3           Web GIS         GIS 6061C         3           Geospatial Databases         GIS 6112C         3           Hyperspectral Remote Sensing         GIS 6127         3           Spatial Data Analysis         GIS 6306         3           Special Topics (Quantum Information Processing)         PHY 6938         3           Computational Physics         PHZ 5156         3           Numerical Relativity         PHZ 7609         3           Social Data Science         Advanced Anthropological Research 1         ANG 6090         3           Advanced Anthropological Research 2         ANG 6092         3           Quantitative Reasoning in Anthropological Research         ANG 6486         3           Social Networks and Big Data Analytics         CAP 6315         3           Quantitative Communication Research         COM 6316         3           Special Topics (Quantitative Methods)         POS 6934         3           Research Design in Political Science         POS 6736         3           Seminar in Advanced Research Methods         SYA 6305         3           Statistics and Data Applications<						
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	Applied Computational Topology	MTG 6329	3			

From: Kevin Wagner < kwagne15@fau.edu> Sent: Tuesday, December 1, 2020 4:06 PM

To: Hanqi Zhuang <zhuang@fau.edu>; Mihaela Cardei <mcardei@fau.edu>

Subject: Re: Please help

The MS in Data Committee unanimously approved.

How's that for fast?

## XMW

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Professor and Chair, Department of Political Science
President, FAU Faculty Senate
Trustee, FAU Board of Trustees
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On Tue, Dec 1, 2020 at 3:52 PM Hanqi Zhuang <<u>zhuang@fau.edu</u>> wrote: Hello Dr. Wagner,

CEECS department is proposing to add CAP 6635 Artificial Intelligence and CAP 6629 Reinforcement Learning to the MS in Data Science and Analytics program, to the Electives Table under the "Data Mining and Machine Learning" group (please see the attachment). Could you please let me know whether the MS DSA Steering Committee approves?

Thank you,

## Hanqi

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