NEW/CHANGE PROGRAM REQUEST
Graduate Programs

FLORIDA ATLANTIC UNIVERSITY

Department Computer and Electrical Eng and Computer Science

College Engineering and Computer Science

UGPC Approval _____
UFS Approval _____
Banner _____
Catalog _____

Program Name		Effective Date *(TERM & YEAR)*
MS in Information Technology and Management	☐ New Program* ✓ Change Program*	**Fall 2020**

Please explain the requested change(s) and offer rationale below or on an attachment.

Revisions of the curriculum for the CS concentrations - restructuring in terms of which courses are core courses and which courses are electives. In addition, two new courses are being added as electives. Please see the attachment for more information.

*All new programs and changes to existing programs must be accompanied by a catalog entry showing the new or proposed changes.

Faculty Contact/Email/Phone	Consult and list departments that may be affected by the change(s) and attach documentation
Dr. Hanqi Zhuang/Zhuang@fau.edu/561-297-3413	ITOM, College of Business

Approved by		Date
Department Chair	Hanqi Zhuang *Digitally signed by Hanqi Zhuang. DN: cn=Hanqi Zhuang, o=FAU, ou=CEECS, email=zhuang@fau.edu, c=US. Date: 2020.02.24 11:51:44 -05'00'*	2/24/2020
College Curriculum Chair	Ramesh Teegavarapu *Digitally signed by Ramesh Teegavarapu. DN: cn=Ramesh Teegavarapu, o=Florida Atlantic University, ou=Civil, Environmental and Geomatic Engineering, email=rteegava@fau.edu, c=US. Date: 2020.02.27 10:17:26 -05'00'*	2/27/2020
College Dean	Mihaela Cardei *Digitally signed by Mihaela Cardei. DN: cn=Mihaela Cardei, o=Florida Atlantic University, ou=, email=mcardei@fau.edu, c=US. Date: 2020.02.27 17:10:46 -05'00'*	2/27/2020
UGPC Chair		
UGC Chair		
Graduate College Dean		
UFS President		
Provost		

Email this form and attachments to UGPC@fau.edu 10 days before the UGPC meeting.

Master of Science with Major in Information Technology and Management

Advanced Information Technology Concentration
Students are required to take the following four three courses from the following list:

Software Engineering	CEN 5035
Object-Oriented Software Design	COP 5339
Data Mining and Machine Learning	CAP 6673 or
Theory and Implementation of the Database Systems	COP 6731
Management of Information Systems and Technology	ISM 6026

In addition, students need to take fivefour electives from the following CEECS courses. Additional CEECS courses may be used as electives with prior approval of the CEECS advisor:

Data Mining and Machine Learning (if not counted in the required courses group)	CAP 6673
Advanced Data Mining and Machine Learning	CAP 6778
Software Maintenance and Evolution	CEN 6027
Software Testing	CEN 6076
Computer Data Security	CIS 6370
Mobile Computing	CNT 6517
Topics in Computer Science	COT 5930
Topics in Computer Science	COT 6930
Computer Performance Modeling	CEN 6405
Video Communication	CNT 6885
Software Architecture and Patterns	CEN 6085
Information Retrieval	CAP 6776
Natural Language Processing	CAP 6640
Introduction to Data Science	CAP 5768
Cloud Computing	CEN 5086
Theory and Implementation of Database Systems (if not counted in the required courses group)	COP 6731
Cyber Security: Measurement and Data Analysis	CTS 6319
Computational Advertising and Real-Time Data Analytics	CAP 6807
Social Network and Big Data Analytics	CAP 6315
Foundations of Vision	CAP 6411
Sensor Networks and Smart Systems	CNT 5109
Advanced Internet Systems	COP 6819
Mobile Application Development	COP 5675

The last two electives must be chosen from the following ITOM courses:

Information Technology Project and Change Management	ISM 6316
Management of Information Assurance and Security	ISM 6328
Enterprise Information Technology Service Management	ISM 6368

Web-Based Business Development	ISM 6508
Information Technology Sourcing Management	ISM 6509
Advanced Business Analytics	ISM 6405
Data Mining and Predictive Analytics	ISM 6136
Social Media and Web Analytics	ISM 6555
Mobile Apps for Business	ISM 6058
Data Management and Analysis with Excel	QMB 6303

Computer Science Data Analytics Concentration

Students are required to take the following three courses ~~from~~ offered by the ~~following list~~ CEECS department:

Software Engineering	CEN 5035
Theory and Implementation of the Database Systems	COP 6731
Introduction to Data Science	CAP 5768
~~Object-Oriented Software Design~~	~~COP 5339~~
~~Data Mining and Machine Learning~~	~~CAP 6673 or~~
~~Introduction to Neural Networks~~	~~CAP 5615~~

In addition, students must take four CEECS electives ~~from the following CEECS courses~~, from which at least two are from the CEECS Data Analytics group.~~;~~

CEECS Data Analytics electives are listed below. Additional CEECS courses may be used in this group with prior approval of the CEECS advisor.

Data Mining and Machine Learning ~~(if not counted in the required courses group)~~	CAP 6673
Introduction to Neural Networks ~~(if not counted in the required courses group)~~	CAP 5615
Social Network and Big Data Analytics	CAP 6315
Deep Learning	CAP 6619
Natural Language Processing	CAP 6640
Data Mining for Bioinformatics	CAP 6546
Information Retrieval	CAP 6776
Web Mining	CAP 6777
Advanced Data Mining and Machine Learning	CAP 6778
Big Data Analytics with Hadoop	CAP 6780
Computer Performance Modeling	CEN 6405
Computational Advertising and Real-Time Data Analytics	CAP 6807
~~Introduction to Data Science~~	~~CAP 5768~~

Other CEECS electives are listed below. Additional CEECS courses may be used as electives with prior approval of the CEECS advisor.

Cloud Computing	CEN 5086
Computer Data Security	CIS 6370
Mobile App Development	COP 5675

Advanced Internet Systems	COP 6819
Sensor Networks and Smart Systems	CNT 5109

The last three electives must be chosen from the following ITOM courses:

Data Mining and Predictive Analytics	ISM 6136
Database Management Systems	ISM 6217
Introduction to Business Analytics and Big Data	ISM 6404
Advanced Business Analytics	ISM 6405
Social Media and Web Analytics	ISM 6555
Data Management and Analysis with Excel	QMB 6303
Data Analysis for Managers	QMB 6603

Note: Students in this concentration meet the requirements for the Big Data Analytics Certificate. Follow up with the CEECS advisor to apply for the certificate.

Dear Dr. Cardei:

The ITOM department approves the proposed changes.

Best Regards:
Tamara
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Tamara Dinev, Ph.D., Department Chair and Professor
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Dear Dr Dinev,

CEECS department is proposing the following items:

1. Catalog revisions for the CS concentrations of the MSITM (see attachment).
2. Two new course proposals (see attachment), which have been added to MSITM:
 COP 6819 - Advanced Internet Systems
 COP 5675 - Mobile App Development
3. Add "CAP 5768 Intro to Data Science" to the Big Data Analytics certificate (see attachment).

Could you please let me know if you approve these items.

Thank you,
Mihaela