

Master of Science with Major in Information Technology and Management

Advanced Information Technology Concentration (30 credits)

Students are required to take the following three courses:	
Software Engineering	CEN 5035
Theory and Implementation of the Database Systems	COP 6731
Management of Information Systems and Technology	ISM 6026
In addition, students need to take five electives from the <u>graduate courses with prefix CAP, CDA, CEN, CIS, COP, COT and CNT offered by the following</u> Department of Electrical Engineering and Computer Science (EECS) <u>courses. Additional EECS department courses may be used as electives with prior approval of the EECS advisor:</u>	
Computational Foundations of Artificial Intelligence	CAP 5625
Mobile Application Development	CAP 5675
Introduction to Data Science	CAP 5768
Social Network and Big Data Analytics	CAP 6315
Foundations of Vision	CAP 6411
Applied Machine Learning	CAP 6610
Natural Language Processing	CAP 6640
Data Mining and Machine Learning	CAP 6673
Information Retrieval	CAP 6776
Advanced Data Mining and Machine Learning	CAP 6778
Computational Advertising and Real-Time Data Analytics	CAP 6807
Advanced Internet Systems	CAP 6819
Cloud Computing	CEN 5086
Software Maintenance and Evolution	CEN 6027
Software Testing	CEN 6076
Software Architecture and Patterns	CEN 6085
Computer Performance Modeling	CEN 6405
Computer Data Security	CIS 6370
Sensor Networks and Smart Systems	CNT 5109
Mobile Computing	CNT 6517
Video Communication	CNT 6885
Topics in Computer Science	COT 6930
Topics in Computer Science	COT 6930
The last two electives must be chosen from the following ITOM courses:	
Mobile Apps for Business	ISM 6058
Data Mining and Predictive Analytics	ISM 6136
Information Technology Project and Change Management	ISM 6316
Management of Information Assurance and Security	ISM 6328

Enterprise Information Technology Service Management	ISM 6368
Advanced Business Analytics	ISM 6405
Business Innovation with Artificial Intelligence	ISM 6427C
Blockchain and Digital Business Transformation	ISM 6455
Web-Based Business Development	ISM 6508
Information Technology Sourcing Management	ISM 6509
Social Media and Web Analytics	ISM 6555
Special Topics	ISM 6930
Data Management and Analysis with Excel	QMB 6303

Information Technology Management Concentration (33 credits)

Students are required to take the following six courses offered by the College of Business:	
Management of Information Systems and Technology	ISM 6026
Information Technology Project and Change Management	ISM 6316
Management of Information Assurance and Security	ISM 6328
Web-Based Business Development	ISM 6508
Information Technology Sourcing Management	ISM 6509
Communication Strategies for Business Professionals and Core-Course Follow-Up	GEB 6215
Students must take two elective from the following ITOM courses:	
Mobile Apps for Business	ISM 6058
Data Mining and Predictive Analytics	ISM 6136
Enterprise Information Technology Service Management	ISM 6368
Advanced Business Analytics	ISM 6405
Business Innovation with Artificial Intelligence	ISM 6427C
Blockchain and Digital Business Transformation	ISM 6455
Social Media and Web Analytics	ISM 6555
Special Topics	ISM 6930
Data Management and Analysis with Excel	QMB 6303
In addition, students must take three electives from the following courses graduate courses with prefix CAP, CDA, CEN, CIS, COP, COT and CNT offered by the Department of Electrical Engineering and Computer Science (EECS), College of Engineering and Computer Science. Additional Department of Electrical Engineering and Computer Science (EECS) courses may be used as electives with prior approval of the EECS advisor:	
Introduction to Neural Networks	CAP 5615

Computational Foundations of Artificial Intelligence	CAP 5625
Introduction to Data Science	CAP 5768
Social Network and Big Data Analytics	CAP 6315
Foundations of Vision	CAP 6414
Applied Machine Learning	CAP 6610
Natural Language Processing	CAP 6640
Data Mining and Machine Learning	CAP 6673
Information Retrieval	CAP 6776
Computational Advertising and Real Time Data Analytics	CAP 6807
Software Engineering	CEN 5035
Cloud Computing	CEN 5086
Software Maintenance and Evolution	CEN 6027
Software Testing	CEN 6076
Software Architecture and Patterns	CEN 6085
Computer Data Security	CIS 6370
Sensor Networks and Smart Systems	CNT 5109
Mobile Computing	CNT 6517
Theory and Implementation of Database Systems	COP 6731
Topics in Computer Science	COT 5930, COT 6930



Computer Science Data Analytics Concentration (30 credits)

Students are required to take the following three courses offered by the Electrical Engineering and Computer Science (EECS) Department:	
Introduction to Data Science	CAP 5768
Software Engineering	CEN 5035
Theory and Implementation of the Database Systems	COP 6731
In addition, students must take four EECS department electives <u>as follows</u> ; at least two of which are from the EECS Data Analytics group: <u>two graduate courses with prefix CAP and two graduate courses with prefix CAP, CDA, CEN, CIS, COP, COT or CNT.</u>	
EECS Data Analytics electives are listed below. Additional EECS department courses may be used with prior approval of the EECS advisor.	
Introduction to Neural Networks	CAP 5615
Social Network and Big Data Analytics	CAP 6315
Data Mining for Bioinformatics	CAP 6546
Applied Machine Learning	CAP 6610
Deep Learning	CAP 6619
Natural Language Processing	CAP 6640

Data Mining and Machine Learning	CAP 6673
Information Retrieval	CAP 6776
Web Mining	CAP 6777
Advanced Data Mining and Machine Learning	CAP 6778
Big Data Analytics with Hadoop	CAP 6780
Computational Advertising and Real-Time Data Analytics	CAP 6807
Computer Performance Modeling	CEN 6405
Other EECS electives are listed below. Additional EECS department courses may be used with prior approval of the EECS advisor.	
Computational Foundations of Artificial Intelligence	CAP 5625
Cloud Computing	CEN 5086
Computer Data Security	GIS 6370
Sensor Networks and Smart Systems	CNT 5109
Mobile Application Development	GOP 5675
Advanced Internet Systems	COP 6819
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
Business Innovation with Artificial Intelligence	ISM 6427C
Social Media and Web Analytics	ISM 6555
Special Topics	ISM 6930
Data Management and Analysis with Excel	QMB 6303
Data Analysis for Managers	QMB 6603

Note: Students in this concentration ~~may satisfy meet~~ the requirements for the [Big Data Analytics certificate](#). Follow up with the EECS advisor to ~~see if you meet all the requirements for the certificate. apply for the certificate.~~

Business Analytics Concentration (33 credits)

Students are required to take the following seven courses offered by the College of Business:	
Management of Information Systems and Technology	ISM 6026
Data Mining and Predictive Analytics	ISM 6136
Introduction to Business Analytics and Big Data	ISM 6404
Advanced Business Analytics	ISM 6405
Business Innovation with Artificial Intelligence	ISM 6427C
Social Media and Web Analytics	ISM 6555
Communication Strategies for Business Professionals and Core-Course Follow-Up	GEB 6215

Students must take one elective from the following ITOM courses:

Mobile Apps for Business	ISM 6058
Information Technology Project and Change Management	ISM 6316
Management of Information Assurance and Security	ISM 6328
Enterprise Information Technology Service Management	ISM 6368
Blockchain and Digital Business Transformation	ISM 6455
Web-Based Business Development	ISM 6508
Information Technology Sourcing Management	ISM 6509
Special Topics	ISM 6930
Data Management and Analysis with Excel	QMB 6303

In addition, students must take three ~~electives from the following courses offered by the College of Engineering and Computer Science. Additional EECS department courses may be used as electives with prior approval of the EECS advisor, electives from the EECS department as follows: two graduate courses with prefix CAP and one graduate courses with prefix CAP, CDA, CEN, CIS, COP, COT or CNT.~~

Introduction to Neural Networks	CAP 5615
Computational Foundations of Artificial Intelligence	CAP 5625
Introduction to Data Science	CAP 5768
Social Network and Big Data Analytics	CAP 6315
Data Mining for Bioinformatics	CAP 6546
Applied Machine Learning	CAP 6610
Deep Learning	CAP 6619
Natural Language Processing	CAP 6640
Data Mining and Machine Learning	CAP 6673
Information Retrieval	CAP 6776
Web Mining	CAP 6777
Advanced Data Mining and Machine Learning	CAP 6778
Big Data Analytics with Hadoop	CAP 6780
Computational Advertising and Real Time Data Analytics	CAP 6807
Computer Performance Modeling	CEN 6405

From: Tamara Dinev <tdinev@fau.edu>
Sent: Wednesday, January 26, 2022 12:26 PM
To: Mihaela Cardei <mcardei@fau.edu>
Cc: Hanqi Zhuang <zhuang@fau.edu>
Subject: RE: Catalog revisions to MS ITM

Dear Dr. Cardei, Dr. Zhuang:

I have no objections to the proposed changes

Best Regards:

Tamara

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From: Mihaela Cardei <mcardei@fau.edu>
Sent: Tuesday, January 25, 2022 8:32 AM
To: Tamara Dinev <tdinev@fau.edu>
Cc: Hanqi Zhuang <zhuang@fau.edu>
Subject: Catalog revisions to MS ITM

Dear Dr. Dinev,

EECS is proposing some catalog revisions to the MSITM program where the EECS electives are identified by the course prefix rather than listing specific courses in the table. Please see the attachment. Could you please review and let us know if you have any objections.

thank you,
Mihaela Cardei