

 <b>FLORIDA ATLANTIC UNIVERSITY</b>	<b>NEW COURSE PROPOSAL</b> <b>Graduate Programs</b>		UGPC Approval _____ UFS Approval _____ SCNS Submittal _____	
	<b>Department: Information Tehcnology and Operatons Management</b>  <b>College: Business</b>		Confirmed _____ Banner _____ Catalog _____	
<b>Prefix</b> ISM  <b>Number</b> 6427	<small>(L = Lab Course; C = Combined Lecture/Lab; add if appropriate)</small> <b>Lab Code</b> C	<b>Type of Course</b> Lecture/Lab	<b>Course Title</b> Business Innovation with Artificial Intelligence	
<b>Credits</b> <small>(Review Provost Memorandum)</small> <b>3</b>	<b>Grading</b> <small>(Select One Option)</small>  <u>Regular</u>  Sat/UnSat	<b>Course Description</b> <small>(Syllabus must be attached; see Guidelines)</small> Students gain a business perspective of Artificial Intelligence and other emerging technologies as drivers of innovation in businesses. They learn how AI is used in practice across organizations and industries, how to plan, manage, and maintain AI projects and how to address the AI challenges and implications for the organization and society.		
<b>Effective Date</b> <small>(TERM &amp; YEAR)</small> <b>Spring 2021</b>	<b>Prerequisites:</b>  N/A  <i>Prerequisites, Corequisites and Registration Controls are enforced for all sections of course.</i>		<b>Academic Service Learning (ASL) course</b>  Academic Service Learning statement must be indicated in syllabus and approval attached to this form.	
		<b>Corequisites</b> N/A	<b>Registration Controls</b> <small>(For example, Major, College, Level)</small> Admission to an FAU graduate program or faculty approval	
<b>Minimum qualifications needed to teach course:</b> Member of the FAU graduate faculty and has a terminal degree in the subject area (or a closely related field.)		<b>List textbook information in syllabus or here</b> Artificial Intelligence for Business: A Modern Business Approach, by John Medicine, September 15, 2019, ISBN-13: 978-1693303081		
<b>Faculty Contact/Email/Phone</b> Derrick Huang / dhuang@fau.edu / 7-2776		<b>List/Attach comments from departments affected by new course</b> CEECS consent emails attached to this form		

<b>Approved by</b> Department Chair _____ College Curriculum Chair _____ College Dean _____ UGPC Chair _____ UGC Chair _____ Graduate College Dean _____ UFS President _____ Provost _____	<b>Date</b> 08/13/2020 8/20/2020 8/26/2020
--	---

Email this form and syllabus to [UGPC@fau.edu](mailto:UGPC@fau.edu) 10 days before the UGPC meeting.



Florida Atlantic University  
COLLEGE OF BUSINESS

**ISM 6427 – 001**  
**Business Innovation with Artificial Intelligence**

**CRN Number: TBA**  
**Term – Spring 2021**  
**Class Location: TBA**  
**Class Meeting Time(s): TBA**

**Professor Information**

Dr. Tamara Dinev  
ITOM, Boca Raton campus  
Office: Fleming Hall 219  
Tel. 561-297-3181  
Email: [tdinev@fau.edu](mailto:tdinev@fau.edu)

**Office Hours**

Monday and Wednesday 3-5 pm  
And by appointment

**Required Text and Materials**

Artificial Intelligence for Business: A Modern Business Approach (2 Books in 1: Artificial Intelligence and Machine Learning for Business & Artificial Intelligence Business Applications), by John Medicine, September 15, 2019, ISBN-13: 978-1693303081  
Other materials provided on Canvas

**Recommended Text and Materials**

N/A

**Course Description**

Students gain a business perspective of Artificial Intelligence and other emerging technologies as drivers of innovation in businesses. They learn how AI is used in practice across organizations and industries, how to plan, manage, and maintain AI projects and how to address the AI challenges and implications for the organization and society.

**Course Prerequisites, Credit Hours, and Class Time Commitments**

Admission to an FAU graduate program or faculty approval

**Requirements:** Basic computer and Internet skills, familiarity with Microsoft Office. Additional software and resource requirements will be communicated to you upon registration and/or at the beginning of the course.

**Supplemental Course Description**

AI drives Business innovation and help business stay competitive. Businesses use AI in many realms, including predictive analytics, product pricing, and marketing, fraud detection, and financial services. In healthcare, artificial intelligence can be used in medical image analysis, language processing in dictation, and automated healthcare services. Because of machine learning capabilities in AI, any data that artificial intelligence is provided with, can be used to learn and to make new, unexpected predictions and recommendations! AI can be applied to your business marketing strategies, social media engagement, and a host of other business functions.



In this class students will grasp the vocabulary, concepts, and categories of AI well enough to communicate effectively with technical teams and colleagues. They will learn how to avoid pitfalls associated with these new technologies, how to develop and refine an AI-related project or initiative for the organization. Students will learn from real-world examples such as Microsoft, T-Mobile, Oracle, Netflix, Airbnb, Danske Bank, Infosys, Teradata, Reliance Jio, Fruit of the Loom and many other companies based on the personal consulting experience of the faculty. The project culminates in a real-worlds project paper and plan that uses AI to innovate and transform at least one aspect of the business in a specific organization. The plan can be put into action after elements are tested throughout the program. If a student does not have an organizational project or initiative to develop, faculty will provide project ideas.

**Course Learning Objectives**

- Learn the terminology and aspects of AI, as they relate to business, well enough to communicate effectively with technical teams and creators of AI models and networks
- Learn how to apply AI to marketing, manage customer experience, operations, and social media, based on use cases from a variety of companies and industries
- Learn how to innovate and transform a business through AI—from strategy and capabilities to planning and implementation

**Course Resources.** Please see the next few pages.

**Grading Scale**

Grade	A	A-	B+	B	B-	C+	C	C-	D+	D	D-	F
Cutoff	93.00 - 100	90.00	87.00	83.00	80.00	77.00	73.00	70.00	67.00	63.00	60.00	<60.00

**Course Evaluation Method**

Case Discussions	20%
Exam (See CANVAS for date)	20%
AI/Machine Learning Project (Individual paper)	30%
Weekly topic presentations	30%
	100%

**Information on Grading Components**

**Case Discussions.** Before coming to class, every student should read the case study with which the chapter to be covered begins. A student will summarize the case for the class before the lecture begins. After completing the lecture and the reading assignment, a class discussion in groups will open over the chapter's case study questions (at the end of the chapter). Each group will come up with a conclusion and proposed solution and the groups' conclusions will be compared.

**Weekly topic presentations.** Each week a group of 2 students will present on a current AI topic as gathered from newspapers, technical journals, and the Internet. These presentations are also to be in written form (Power Point preferred) and emailed to me in advance. One presentation per student for the semester. Place name, course number and date on the report. Each presentation should be approximately 15 minutes student talk, 10 minutes discussion. Presentations must be scheduled prior to the due date and coordinated with me. You should inform me as to what topic you plan to cover in advance. All no shows will have a grade of zero.



## AI Project

The project is a team project of 2 students. Individual project or a team of 3 can proceed only after documented approval by the professor (email), and this should be done before the proposal's due date. Majority of the projects will have a business-oriented topic which will advance our understanding of AI.

Students are encouraged to research and present:

- AI topic not covered in class
- AI tool or application demo. Demo of solving a business problem is expected.
- Societal or Legal implications of AI
- AI tools for non-Windows systems (Unix, Linux, Macintosh). Personal laptops may be needed for presentation. Demo of solving a business problem is expected.

Upon choosing a project topic, the team will write a short, no more than one-page proposal and email it to me. I will immediately confirm the receipt. If you do not receive confirmation, please resend as soon as possible. Upon receipt, I will approve or suggest changes within 24 hours. At that time the students can start working on the projects.

Due dates: There is a due date for team formation and a due date for submitting the project proposal, which will be communicated on Canvas.

Presentation. PPT Slides are due before the presentation date by email. Every presentation should be within the time specified by the instructor, dependent on the number of teams presenting. However, maximum time will be 15 minutes, with 5 minutes left for questions.

Project grading. Oral presentations will be graded based on clarity, creativity and originality. Thus it is very important that every team member is fully prepared, present and fully participating. How much effort s/he put in the project and his or her mastering of the topic will be mainly judged by the individual presentation and the questions – from there will come the difference in the project grades among team members.

Project (the common) grade will be based on the following:

1. The presentation is well prepared, organized and interesting. Coherent arguments, good grammar and explanation.
2. The presentation showcased all major project components
3. The presentation completed within the allocated time
4. All team members are professionally dressed and demonstrate professional behavior
5. The topic chosen is technically intensive or information rich, with the appropriate level of difficulty.

The final project grade will be the average of the common project grade and the individual student grade (based on the quality of the individual presentation and the questions asked by me).

### **Additional Course Policies**

#### **Submitting your work**

Coursework submission dates are provided on your Canvas site. Deadlines are strictly adhered to. You must submit each assignment on, or before, 10pm on the submission date provided.

#### **Missing Exams**

Make-up exams will not be given unless the student has a documented serious illness (i.e. hospitalization) or other extreme personal circumstance, or absent due to a University sanctioned event, and must be arranged PRIOR to the scheduled exam period.



### **Late Assignments**

A sliding penalty of 5 points per day late up to 5 business days will be applied to late submissions. Over 5 days late will result in a 0. However, similar to the Missing Exams policy, if you have a documented excuse, exceptions will be made. Please get in touch with me as soon as possible if there are genuine reasons that would cause you to be late on an assignment.

### **Attendance Policy**

You must comply with the working arrangement. In general, students are expected to attend all of their scheduled University classes and to satisfy all academic objectives as outlined by the instructor. The effect of absences upon grades is determined by the instructor, and the University reserves the right to deal at any time with individual cases of non-attendance.

Students are responsible for arranging to make up work missed because of legitimate class absence, such as illness, family emergencies, military obligation, court-imposed legal obligations or participation in University-approved activities. Examples of University-approved reasons for absences include participating on an athletic or scholastic team, musical and theatrical performances and debate activities. It is the student's responsibility to give the instructor notice prior to any anticipated absences and within a reasonable amount of time after an unanticipated absence, ordinarily by the next scheduled class meeting. Instructors must allow each student who is absent for a University-approved reason the opportunity to make up work missed without any reduction in the student's final course grade as a direct result of such action.

### **Etiquette and/or Netiquette Policy**

- Course requirements and Schedule may vary based on class discussions and course progress. This is a web assisted course. Students must have access to a PC with an Internet connection and access to Canvas.
- Students are responsible for retaining copies of all material (hard-copy, grade sheets and disk copies) until the final grade is received.
- Inappropriate behavior distracts other students and interferes with their learning experience. Inappropriate behavior may include arriving late, leaving early, talking, and so on. Rude and inappropriate behavior will not be tolerated. Cell phones must be turned off and beepers set to vibrate before you enter class. Since it is my responsibility to provide an environment that is conducive to learning for everyone in the class, I will ask any student who chooses to repeatedly (more than once) distract others to leave. In particularly egregious cases, I will have the student permanently removed from the class.

### **Anti-plagiarism Software**

Written components of any assignment or project may be submitted to anti-plagiarism software to evaluate the originality of the work. Any students found to be submitting work that is not their own will be deemed in violation of the University's honor code discussed above.





**Course Outline and Schedule**

Week	Date	Topic	Readings	Critical Items
1		Introduction – Business Aspects of AI and Machine Learning	Chapter 1	Welcome Quiz
2		Ethical and Societal implications of AI and Machine Learning	Chapter 2, 3, and 6	Case Discussions 1
3		AI and BIG TECH and Government	Chapter 4 and 5	Case Discussions 2
4		The AI Revolution: Trends, Tools, and Applications	Chapter 7	
5		AI Strategy and Capabilities: Transforming Your Business with Deep Learning	Chapter 8	Case Discussions 3
6		Technical Approaches to Cognitive Technologies and Machine Learning	Chapter 9	
7		AI Applications in Select Industries – Marketing and Customer Experience Management	Chapter 10, 11	Case Discussions 4
8		CLASS EXAM		CLASS EXAM
9		SPRING BREAK - NO CLASS SESSION		
10		AI Applications in Select Industries – Healthcare, Operations Management, Autonomous Vehicles and Transportation	Chapter 10, 11	Case Discussions 5
11		Transforming Your Business with Key Applications: Computer Vision & Natural Language Processing	Additional Materials on Canvas	Case Discussions 6
12		AI and Organizations: Strategy, Building Your AI Team	Chapter 10, Additional Material	AI/Machine Learning Project due
13		Student Class Presentations		
14		Student Class Presentations		

**Selected University and College Policies**

**Code of Academic Integrity Policy Statement**

Students at Florida Atlantic University are expected to maintain the highest ethical standards. Academic dishonesty is considered a serious breach of these ethical standards, because it interferes with the university mission to provide a high quality education in which no student enjoys an unfair advantage over any other. Academic dishonesty is also destructive of the university community, which is grounded in a system of mutual trust and places high value on personal integrity and individual responsibility. Harsh penalties are associated with academic dishonesty. For more information, please see FAU Regulation 4.001 at:

[http://www.fau.edu/regulations/chapter4/4.001\\_Code\\_of\\_Academic\\_Integrity.pdf](http://www.fau.edu/regulations/chapter4/4.001_Code_of_Academic_Integrity.pdf)



### **Disability/Accessibility Policy Statement**

In compliance with the Americans with Disabilities Act Amendments Act (ADAAA), students who require reasonable accommodations due to a disability to properly execute coursework must register with Student Accessibility Services (SAS) and follow all SAS procedures. SAS has offices across three of FAU's campuses – Boca Raton, Davie and Jupiter – however disability services are available for students on all campuses. For more information, please visit the SAS website at [www.fau.edu/sas/](http://www.fau.edu/sas/).

### **Counseling and Psychological Services (CAPS) Center**

Life as a university student can be challenging physically, mentally and emotionally. Students who find stress negatively affecting their ability to achieve academic or personal goals may wish to consider utilizing FAU's Counseling and Psychological Services (CAPS) Center. CAPS provides FAU students a range of services – individual counseling, support meetings, and psychiatric services, to name a few – offered to help improve and maintain emotional well-being. For more information, go to <http://www.fau.edu/counseling>.

### **Religious Observances Accommodation Policy Statement**

In accordance with rules of the Florida Board of Education and Florida law, students have the right to reasonable accommodations from the University in order to observe religious practices, observances, and beliefs with regard to admissions, registration, class attendance and the scheduling of examinations and work assignments. For further information, please see FAU Regulation 2.007 at: [FAU Regulation 2.007](#).

### **University Approved Absence Policy Statement**

In accordance with rules of the Florida Atlantic University, students have the right to reasonable accommodations to participate in University approved activities, including athletic or scholastics teams, musical and theatrical performances and debate activities. It is the student's responsibility to notify the course instructor at least one week prior to missing any course assignment.

### **Incomplete Grade Policy Statement**

A student who is passing a course, but has not completed all work due to exceptional circumstances, may, with consent of the instructor, temporarily receive a grade of incomplete ("I"). The assignment of the "I" grade is at the discretion of the instructor, but is allowed only if the student is passing the course.

The specific time required to make up an incomplete grade is at the discretion of the instructor. However, the College of Business policy on the resolution of incomplete grades requires that all work required to satisfy an incomplete ("I") grade must be completed within a period of time not exceeding one calendar year from the assignment of the incomplete grade. After one calendar year, the incomplete grade automatically becomes a failing ("F") grade.

### **Withdrawals**

Any student who decides to drop is responsible for completing the proper paper work required to withdraw from the course.

### **Grade Appeal Process**

A student may request a review of the final course grade when s/he believes that one of the following conditions apply:

- There was a computational or recording error in the grading.
- Non-academic criteria were applied in the grading process.
- There was a gross violation of the instructor's own grading system.

The procedures for a grade appeal may be found in Chapter 4 of the University Regulations, <http://www.fau.edu/regulations/chapter4/index.php>



### **Disruptive Behavior Policy Statement**

Disruptive behavior is defined in the FAU Student Code of Conduct as “... activities which interfere with the educational mission within classroom.” Students who behave in the classroom such that the educational experiences of other students and/or the instructor’s course objectives are disrupted are subject to disciplinary action. Such behavior impedes students’ ability to learn or an instructor’s ability to teach. Disruptive behavior may include, but is not limited to: non-approved use of electronic devices (including cellular telephones); cursing or shouting at others in such a way as to be disruptive; or, other violations of an instructor’s expectations for classroom conduct.

### **Faculty Rights and Responsibilities**

Florida Atlantic University respects the right of instructors to teach and students to learn. Maintenance of these rights requires classroom conditions which do not impede their exercise. To ensure these rights, faculty members have the prerogative:

- To establish and implement academic standards
- To establish and enforce reasonable behavior standards in each class
- To refer disciplinary action to those students whose behavior may be judged to be disruptive under the Student Code of Conduct.

### **REFERENCES**

Artificial Intelligence for Business: A Modern Business Approach (2 Books in 1: Artificial Intelligence and Machine Learning for Business & Artificial Intelligence Business Applications), by John Medicine, September 15, 2019, ISBN-13: 978-1693303081

Artificial Intelligence: The Insights You Need from Harvard Business Review (HBR Insights Series), by Harvard Business Review, Thomas H. Davenport, Erik Brynjolfsson, Andrew McAfee, H. James Wilson, HBR Insights Series, September 17, 2019, ISBN-13: 978-1633697898

Artificial Intelligence: A No Non-sense Handbook for Business Leaders Paperback – October 16, 2019  
by Tyler Dawson (Author), ISBN-13: 978-1700351647

Artificial Intelligence and Machine Learning for Business: A No-Nonsense Guide to Data Driven Technologies, by Steven Finlay, McGraw Hill, 3rd Edition, ISBN-13: 978-1999730345

Artificial Intelligence Basics: A Non-Technical Introduction Paperback – August 2, 2019, by Tom Taulli, Apress, ISBN-13: 978-1484250273

Artificial Intelligence for Business: A Roadmap for Getting Started with AI 1st Edition,  
by Jason L. Anderson (Author), Jeffrey L. Coveyduc (Author), Wiley, 2020. ISBN-13: 978-1119651734

Artificial Intelligence for Business: What You Need to Know about Machine Learning and Neural Networks, by Doug Rose, Chicago Lakeshore Press 2018, ISBN-13: 978-0986435614

AI for People and Business: A Framework for Better Human Experiences and Business Success 1st Edition, by Alex Castrounis, O'Reilly Media; 1 edition, ISBN-13: 978-1492036579





Florida Atlantic University  
COLLEGE OF BUSINESS

The Future of Business: An Introduction to Artificial Intelligence, by David Vandegrift, Oct 7, 2019, ISBN-13: 978-1698191508

Applied Artificial Intelligence: A Handbook For Business Leaders Paperback – June 5, 2018, by Mariya, Yao, Adelyn Zhou, Marlene Jia, TOPBOTS 2018, ISBN-13: 978-0998289021



Derrick Huang &lt;dr.dhuang@gmail.com&gt;

---

**FW: MSITM & Big Data Certificate revisions**

1 message

---

**Tamara Dinev** <tdinev@fau.edu>  
To: Chiang-Sheng Huang <dhuang@fau.edu>

Thu, Aug 13, 2020 at 12:27 PM

FYI

Best Regards:

Tamara

=====

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](mailto:tdinev@fau.edu)Google Scholar: <https://scholar.google.com/citations?user=YH8QZ-YAAAAJ&hl=en>

---

**From:** Hanqi Zhuang <[zhuang@fau.edu](mailto:zhuang@fau.edu)>  
**Sent:** Thursday, August 13, 2020 12:22 PM  
**To:** Tamara Dinev <[tdinev@fau.edu](mailto:tdinev@fau.edu)>; Mihaela Cardei <[mcardei@fau.edu](mailto:mcardei@fau.edu)>  
**Subject:** Re: MSITM & Big Data Certificate revisions

CEECs approve the course. Thanks, Hanqi

Get [Outlook for iOS](#)

**From:** Tamara Dinev <[tdinev@fau.edu](mailto:tdinev@fau.edu)>  
**Sent:** Thursday, August 13, 2020 12:13 PM  
**To:** Hanqi Zhuang; Mihaela Cardei  
**Subject:** FW: MSITM & Big Data Certificate revisions

Dear Dr. Zhuang:

I am asking for your formal approval for the new graduate course ISM 6427 - Business Innovation with Artificial Intelligence.

We mutually agreed to change the title of the new course you approved earlier in the Summer, as evident from the email below and the attached documents from Dr. Cardei. Once I have the approval from you, I will proceed with the College vote. I have to have the documents by Friday, so we can go together for the University Council, the due date for UGPC September meeting is 8/30

Thank you!

Best Regards:

Tamara

=====

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](mailto:tdinev@fau.edu)

Google Scholar: <https://scholar.google.com/citations?user=YH8QZ-YAAAAJ&hl=en>

---

**From:** Mihaela Cardei <[mcardei@fau.edu](mailto:mcardei@fau.edu)>  
**Sent:** Thursday, July 30, 2020 3:10 PM  
**To:** Tamara Dinev <[tdinev@fau.edu](mailto:tdinev@fau.edu)>

**Cc:** Hanqi Zhuang <[zhuang@fau.edu](mailto:zhuang@fau.edu)>  
**Subject:** Re: MSITM & Big Data Certificate revisions

Thank you Tamara. Attached are the revised documents. I will proceed with the approvals.

regards,

Mihaela

---

**From:** Mihaela Cardei <[mcardei@fau.edu](mailto:mcardei@fau.edu)>  
**Sent:** Thursday, July 30, 2020 8:28 AM  
**To:** Tamara Dinev <[tdinev@fau.edu](mailto:tdinev@fau.edu)>  
**Cc:** Hanqi Zhuang <[zhuang@fau.edu](mailto:zhuang@fau.edu)>  
**Subject:** MSITM & Big Data Certificate

Hi Tamara,

I am following up on the revisions that we discussed last month on MSITM and Big Data certificate.

In the view of our recent discussions, could you please provide a revision of the title for the course "ISM6429 Artificial Intelligence and Machine Learning for Business" where the emphasis is on Business?

Some options that you suggested are "Business Transformation through Artificial Intelligence" or "Business Innovation through/with Artificial Intelligence".

Could you please let me know the title for the graduate course so that I can revise the MSITM & Big Data documents accordingly?

Thank you,

Mihaela