

# MANAGEMENT INFORMATION SYSTEMS PROGRAM REVIEW

BBA/BBS in Management Information Systems (MIS)

Master of Science in Information Technology Management (MSITM)

Classification of Instructional Programs (CIP) Code: **52.1201** 

Department of Information Technology and Operations Management
College of Business
Florida Atlantic University

2014-2020 Program Review Self-Study Report

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# Section A. Mission and Purpose of the Program

#### Mission

The Mission of the Department of Information Technology and Operations Management (ITOM): To develop competence in information systems, operations management (including quality management), and related decision sciences disciplines for traditional and non-traditional students across the College of Business; to produce skilled individuals proficient in information technology who are able to contribute effectively to their organizations and communities in an ever-evolving technological environment; to engage in an active partnership with the business community; and to continually innovate and increase the quality of its educational and research activities in a manner that increases education effectiveness and global reach.

#### **Vision**

In an environment that integrates information technology and operations management the Department balances world renown research with excellence in teaching to create successful students. Both the Department and its students are in alignment with the community we serve thus having a positive impact on the outside community (all communities) while maintaining a friendly collegial atmosphere which generates trust among ourselves. We use technology effectively, distance and locally providing multiple venues for the learning experience. Ethics and integrity are at our core, especially in our openness (acceptance each other's' views) and balance. We embrace change management and seek to improve our enrollment.

# **Alignment with the University Strategic Plan**

ITOM, as part of the College of Business, makes significant contributions to the broader mission and goals of the College and FAU. With its presence in both Palm Beach and Broward campuses, ITOM provides high-quality educational opportunities to serve the needs of local and international students in the South Florida area.

The ITOM vision and mission are well aligned with the Florida Atlantic University Strategic Plan for the Race to Excellence (2015-2025) which includes an excellent education and high-quality programs in areas of strategic emphasis (STEM areas). The MIS and MSITM programs support FAU's focal areas, known as Pillars and Platforms. Among the pillars, of particular relevance is Healthy Aging, since Information Systems and Healthcare analytics and electronic systems are critical for effective delivery of healthcare. Among the platforms, the Big Data Analytics is one

of the major technologies driving the evolution of the 21st century economy. The ITOM programs support also platforms such as Community Engagement and Economic Development, as well as Global Perspectives and Participations. In particular:

- The University's aspiration to recruit and retain the highest talent in faculty. Our faculty abbreviated vitae are provided in the Appendix 2. Our faculty are world recognized researchers who publish in premier journals and are editors of top journals in the field. They are also engaged in community serving in industry association such as the Port Everglades Association. In recent years, the Department has hired junior tenure-track faculty with a very strong potential to build national reputations. Our tenured faculty have an outstanding record in citation indices and their contributions to research and external funding.
- The University's goal to provide excellent education and high-quality programs in the areas of strategic emphasis (STEM areas). The ITOM's MIS and MSITM Programs (CIP 52.1201) are listed on the State University System of Florida Programs of Strategic Emphasis (PSE) under the "STEM" category. Science, Technology, Engineering, and Math (STEM) is a category in the current version of the strategic plan aimed to emphasize the importance of these programs to Florida's economy. This category highlights the need of more degrees to fill the gap between current and projected state job demand. The MIS programs have a strong IT, math and Business Analytics components, along with additional components from Artificial Intelligence. The MIS programs are academic program of the highest quality. World-class faculty and research experts train the students in top skills needed to be competitive in the field and area of emphasis. The high quality of the program is ensured by (1) a strong curriculum, delivering the foundations and principles of Management Information Systems, integrated with major subfields such as Artificial Intelligence, Big Data Analytics, and Blockchain; (2) high quality applied industry projects supervised by experts in the field; and (3) software and simulation and business analytics systems that will expose students to real world situations and problem solving.

## **ITOM Department Highlights**

The Degree Programs offered by the ITOM department are summarized in the following chart.

Major Name	CIP Code	Degree
BBA in Management Information Systems	52.1201	Bachelors
BS Management Information Systems	52.1201	Bachelors
MS in Information Technology and Management	52.1201	Masters
MS in Supply Chain Management	52.0203	Masters

As the name implies, the ITOM Department is the home of faculty in two disciplines: Management Information Systems (MIS) and Operations and Supply Chain Management (OM). As such, in addition to being home of the MIS undergraduate and graduate majors, the Department provides service courses to the College core business curriculum, as well as the master's degree in supply chain management. A large part of the ITOM FTE production is from the service courses.

# **Section B. Last Program Review**

The last program review was conducted in 2013. The Review Team report was written on February 21, 2013.

Per the review team summary, "At the department, college and university levels there appear to be several positive initiatives that can provide a strong tail wind for future growth and productivity in the Department of Information Technology and Operations Management (ITOM)." In their conclusion, the review team wrote that "Overall, the ITOM department is in good shape, well managed, and with a caring teaching faculty and growing strength in scholarly research. Enrollments are strong and growing and the students seem well pleased with their undergraduate and graduate educational experiences. However, this growth indicates a corresponding need for more faculty members, particularly those with strong research skills. No major problems or deficiencies were found and the findings and recommendations that are listed above are designed to assist the Department and the College to make further improvements in an already strong department". The review team made very constructive recommendations that guided the strategic and operational development of the Department for the next seven years.

The following "Strategic Goals and Action Plans" were established in the 2014 Review. The 2018 Progress Report Response follows each goal statement below. An additional update of major changes since the 2018 progress report is included as well.

#### Goal 1

To distinguish and brand the Department and the College in Business Analytics. The 5-7-year plan includes multiple action plans which build upon existing resources dedicated to offering an undergraduate concentration in Business Analytics for Management Information Systems (MIS) majors. First, a concentration in Business Analytics for MBA students should be developed and offered within the market rate online MBA program. Second, a Center for Business Analytics should be created. The Center is intended to provide an affiliation for interested faculty across departments in the College and support single discipline as well as interdisciplinary work. The long-term vision for the Center (see the attached) intended to attract national and international interest includes an annual conference for researchers from the academy as well as from business, and a marketplace for careers in "big data". Hopefully, this initiative would coincide with a third action plan of naming the Center with a \$15 million donation.

#### **2018 Progress Report:**

• Creation of Center for Business Analytics. ITOM has been an integral part and one of the University leaders of the Data Analytics and Business Analytics initiatives. The ITOM Chair is

an active member of the steering committee of the Data Analytics Strategic Platform of FAU. The Vice President of Research of FAU created University-wide, umbrella Center for Data Analytics, and appointed as its Chair Dr. Taghi Khoshgoftaar, a professor from the College of Engineering and Computer Science. Thus, the envisioned Center for Business Analytics, although not a separate entity within College of Business, is actively operating within the University umbrella Center. The Business Analytics initiatives continue to be dynamic, vibrant, and at the core of the ITOM objectives. They involve industry, curriculum changes, strategic hiring, and new programs. Thus, even though a Center for Business Analytics has not been actually created, all the objectives envisioned in creating it, have been effectively achieved. Interested faculty across departments in the College actively work together to support single discipline as well as interdisciplinary work. For example, courses in Healthcare analytics and Sports Management analytics have been available within the respective degrees and they are highly popular. Another achievement is the creation of Business Analytics concentration within the MSITM degree. Students can specialize in Business Analytics while obtaining their Master's degree. Similarly, we have created a Big Data Analytics Graduate Certificate for professionals and students from other fields. Both programs are highly popular and in demand. In conclusion, we believe we are achieving progress toward our overall goal to "distinguish and brand the Department and the College in Business Analytics".

#### **Update Since 2018 Progress Report:**

 We created an MBA concentration in Business Analytics. This concentration, along with the Big Data Analytics Graduate Certificate, are in high demand and help strengthen the educational opportunities for all business students and strengthen the brand of the Department and the College in Business Analytics. We also created undergraduate and graduate courses in Artificial Intelligence, as well as undergraduate minor in Artificial Intelligence.

#### Goal 2

To strengthen the area of Operations and Supply Chain Management. As the name implies, the Department is the home of faculty in two disciplines, one of which is Operations Management. In recent years, interest among researchers in Operations Management has increasingly focused on Supply Chain Management. At the same time, the Department seeks to leverage FAU's location in one of the country's most dynamic areas of international trade and transportation. These two significant matters are the basis for the following action plans. First, the faculty will engage in a strategic exercise intended to develop the most appropriate academic undergraduate/graduate program to advance Supply Chain Management as a critical area of business preparation at FAU. This exercise will necessarily address how other disciplines such as Management Information Systems, Marketing, and International Business should be incorporated to such a program(s). Second, a Center for Supply Chain Management should be created. The faculty should develop a vision for the Center which in collaboration with potential stakeholders in south Florida. The Center should also leverage the proposed Center for International Business to maximize synergies of faculty and student interest across both areas.

#### **2018 Progress Report**

- We engaged the faculty in a strategic exercise intended to develop the most appropriate academic undergraduate/graduate program to advance Supply Chain Management (SCM) as a critical area of business preparation at FAU. We underwent a comprehensive investigation of the demand, the resources, and the cross-disciplinary options for creating a viable program in Supply Chain Management. We forged a dynamic relationship with Marketing, International Business, and the College of Engineering and Computer Science, and strategized on how we should incorporate programs or courses from these departments.
- We successfully hired a leader in the field of Supply Chain Management and Ports Logistics, Professor Dr. Menachof from University of Hull, UK, who took the lead in this initiative. He conducted multiple conversations and exercises with the above departments. He engaged in redesigning the course curriculum in both the undergraduate and graduate courses for Quality Management and Supply Chain Management (SCM). Along with our above listed partners, we are in the process of creating Graduate Certificate in Supply Chain Management and Transportation Logistics which is now going through faculty votes in the two Colleges. We expect it to be in the catalog during the next academic year. Dr. Menachof and the ITOM Chair also designed a proposed graduate Master degree in SCM. Currently he is coordinating with the Dean, the Executive Programs and the other interested constituents on how to move ahead.
- We have been actively working toward creation of the center. Dr. Menachof has also engaged in creating industry contacts with main stakeholders in South Florida, including the Fort Lauderdale and Boca Raton Chambers of Commerce and the Port Everglades Association. He engages and collaborates with all stakeholders from the industry, College of Engineering and the College of Business, to craft a vision for the Center. We also are working with Dr. Trevino, who is the Program Director for International Business.
- We are in the process of hiring a faculty in Supply Chain Management/Business Analytics to help us achieve our Goal 1 and Goal 2. In conclusion, we believe we are achieving progress toward our overall goal to "strengthen the area of Operations and Supply Chain Management".

#### **Update Since 2018 Progress Report**

- ITOM completed hiring faculty in Supply Chain Management and Business Analytics. The stronger intellectual capital gave results. Publications followed in the most prestigious journals in that area, such as Journal of *Operations Management, Production and Operations Management, Decision Sciences, etc.*
- We created the MS in Supply Chain Management which will be offered for the first time in 2021.

#### Goal 3

To enhance the quality of the undergraduate MIS programs and the graduate MSITM program. The demand for skills in Management Information Systems has always been highly dynamic,

however over the past 15 years it has been especially so because of a significant trend in outsourcing programming development overseas. Keeping up with the dynamic nature of the demand for different skill sets has been challenging for MIS departments across the country. Recently there has been a resurgence in demand for graduates in MIS (as attested by the increase of MIS majors) and for individuals with more sophisticated skills, especially, again, in programming development. This trend is the basis for the following action plan. The Department will consider reintroducing programming as an area of concentration, which has historically been an area major concentration since the Department was created in the late 1980s.

#### **2018 Progress Report:**

- We have actively been working toward this academic goal. First, we strengthened the
  offering of the core programming course, ISM 3230. We progressed from offering one
  section each Fall and each Spring to offering two sections each semester, and one
  section in the Summer. In this way we assure we meet the demand of students wanting
  to learn programming. Next, we engaged in active promotion of the value of
  programming skills and web development skills.
- During 2015-2016, we started to offer Mobile Development for business courses (ISM 6058 and ISM 4053). Initially they struggled with low enrollments, but the Chair obtained the support of the Dean's office to protect these courses from cancellations for a period of 2 to 3 years. The courses now have stable enrollments, both at graduate and undergraduate levels.
- In Spring 2018 we offered for the first time a 3-Tier Web Development project course (Creating dynamic web content, with user transactions, based on PHP, Java Server Pages and Servlets, Java Script, and HTML 5). With active promotion from the Introduction to Computer Systems and Software Development (ISM 3230) instructors, this course started with quite low enrollment only 6 students. The Chair appointed the most caring and knowledgeable instructor to teach the course. The Chair worked with the Dean's office to offer the course in spite of the low enrollments, affording appropriate time to gain traction. Currently, the course enjoys healthy enrollments and students are excited to learn.

#### **Update Since 2018 Progress Report**

 We have been very successful in this goal. All of the above-mentioned courses have strong enrollments and are offered every semester. Introduction to Computer Systems and Software Development (ISM 3230) is offered two sections every semester and one section in the summer semester. Additionally, we introduced an Advanced Business Analytics course, ISM 4403, with programming in Python, R, etc.

# **Major Changes Made Since the Last Review**

The following extensive changes were made based on the Review Team report.

- The Master of Science in Supply Chain Management, a STEM program, was proposed and approved.
- The Master of Science in Information Technology and Management, also a STEM program, which was just starting at the time of the last program review, has solid enrollments and been substantially improved by establishing two concentrations: IT Management and Business Analytics.
- The accelerated BBA-MSITM pathway which was just starting at the time of the last review, has now grown stronger and become very popular. Many MIS majors enroll in the master's program during their junior or senior year.
- Big Data Analytics Graduate Certificate was created jointly with Computer Science Department at the College of Engineering.
- In response to market demand, the business analytics courses offered by the Department were revised to incorporate additional skills such as Python, R, Social Media analytics, etc.
- The Department hired four new tenure-track faculty and instructors to meet the
  increased demand for courses. One tenure-track faculty member, hired in 2014,
  received tenure and was promoted to Associate Professor. Instructors were promoted
  to Senior and University instructors during the review period.

# Section C. Instruction

## **Student Learning Outcome Assessments**

Clear learning goals have been established for the program as a whole and for every course taught in the Department. These goals are now part of the respective course syllabus. The goals were established in 2011 and have been constantly reviewed and adjusted per the assessment results.

The results of the Student Learning Outcome Assessments are discussed in two levels: 1) at course coordination meetings that are regularly conducted for multiple section courses; and 2) at department meetings in which each course coordinator gives a report to the whole faculty. As a result of the discussion or the results of the assessment, points for improvement and methods of improvement are identified. Improvements have included textbook changes; topic elimination or enhancement depending on how it serves the purpose of the overall program or if it is duplicated and offered in another course; and new methodology such as class discussion, team project, computer technology, new quizzes or similar.

Appendix 1c provides the Academic Learning Compacts for the Undergraduate MIS major Appendix 1d provides the Assessment plan and outcomes for the academic year 2018-2019 for the Undergraduate MIS major and the Graduate MSITM program.

#### **Baccalaureate Programs**

ITOM offers one major in the College of Business, namely Management Information Systems (MIS). MIS develops specialized proficiencies in management information technology and leads to the B.B.A. or B.S. degree. It focuses on the concepts and tools necessary for analyzing, designing, planning and developing resources.

#### **Admissions Criteria**

The middle 50% of freshmen who were admitted for 2020-2021 were reported as:

High School GPA (out of 4.0): 3.38-3.98
ACT Composite Score: 23-29
SAT Total Score: 1110-1260

#### **Enrollment Information**

The tables below show the unduplicated headcount of MIS majors by degree program and does not consider the MIS concentrations.

The MIS major grew 44% since the last Academic review. ITOM has successfully and consistently reversed the critically low enrollments during the last review cycle (2006-2012). We attribute this to:

- 1) The national trends of increased interest in IT and MIS in particular; and
- 2) The substantial Department efforts in curriculum overhaul, industry outreach, and student recruitment and advising efforts

Enrollment by Major unduplicated count						
IS						
7						
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5						
2						
5						
ļ						

As the IT job sectors of Information Security and Business Analytics continue to increase in demand, we are optimistic that the MIS major will continue to grow. An upward trend is clearly visible and will most likely continue as the national priority of STEM disciplines redirects the future graduates to technology-focused education.

#### FTE and the SCH Productivity

Fulltime Equivalent (FTE) is a measure of instructional activity based on Student Credit Hours (SCH). Annualized FTE is based on the standard national definition and calculated as the undergraduate and graduate SCH divided by 30 and 24, respectively. State Fundable Student Credit Hours are those student credit hours for which the University receives funding by the state. So, anything that is a waiver without state funding to support it (TA/RA, athlete non-resident, admissions perks, employees, 60 yo+ auditors, DCF children, children of deceased first

responders) and anything that is non-state funded (market-rate programs) is non-fundable FTE. Thus, state-fundable FTE includes only those credits where students enroll and pay full price from their own funds (or financial aid, excluding waivers) in a Florida SUS program that the state tax dollars directly supports.

The tables below provide the FTE and SCH for the undergraduate MIS, for lower division and upper division students.

	BBA/BS (MI	S)							
	Lower Divis	sion UG				Upper Di	vision UG		
		Non-		Non-			Non-		Non-
	State	State	State	State		State	State	State	State
	Fundable	Fundabl	Fundabl	Fundabl		Fundabl	Fundabl	Fundabl	Fundab
	SCH	e SCH	e FTE	e FTE		e SCH	e SCH	e FTE	e FTE
2014-15	4230	93	141	3.1	2014-15	14757	495	492	16
2015-16	4938	144	165	4.8	2015-16	14706	432	490	14
2016-17	4521	138	151	4.6	2016-17	16884	393	563	13
2017-18	4941	54	165	1.8	2017-18	17025	510	568	1
2018-19	5844	123	195	4.1	2018-19	17763	360	592	:
2019-20	5535	228	185	7.6	2019-20	17604	582	587	19

SUMMARY								
	Total							
	SCH	Total FTE						
2014-15	22455	772.35						
2015-16	22881	784.83						
2016-17	25581	883.95						
2017-18	26514	917.55						
2018-19	28341	980.23						
2019-20	28797	1001.26						

Per the Summary table above, during the period under review, the ITOM's MIS program has increased the FTE by 30% (from 772.35 to 1001.26) and the SCH by 28%. This is a considerable increase given that ITOM already generates the highest number of FTE in the College for majors outside the Department but within the College. In addition to the FTEs generated for the major, as mentioned above, ITOM provides the majority of the instruction of core business courses required for all business majors.

The data in the table below represent the SCH and the FTE contributions for the Information Technology and Operations Management (ITOM) Department as a whole. This includes not just the contributions based on MIS majors, but the contributions of all the service courses required

of all the Business majors. Per the data in the table, ITOM produces around 15% of the College's total Annualized State-Fundable FTEs. It is the third largest Graduate FTE producer in the College, third largest Lower and Upper Division FTE producer, and along with Economics, third largest total FTE producer for the College.

	Courses offered by:	Information Technology & Operations Management				College of Business	University Total	
		2014- 2015	2015- 2016	2016- 2017	2017- 2018	2018- 2019	2018- 2019	2018-2019
Course Level	FTE produced by students who are:	0.1	0.7	0.2	0.1	0.6	8.2	1,028.20
	Majors within the department	0.1	0.7	0.2	0.1		5.2	1,020.20
Lower Division Undergraduate	Majors outside the department, but within the college	65.8	83.5	77.3	117.9	144.3	696.8	2,745.30
-	Majors outside the college	39.9	39.3	35.5	46.7	49.9	192.2	5,889.50
	Total	105.8	123.5	113	164.7	194.8	897.2	9,663.00
	FTE produced by students who are:  Majors within the department	61.1	71.9	84.2	108.3	106.9	1,444.10	7,025.90
Upper Division Undergraduate	Majors outside the department, but within the college	298.6	287.7	327.1	448.1	469.9	1,836.20	3,275.10
	Majors outside the college	9.2	8	10.8	11.1	15.3	389.7	1,703.40
	Total	368.9	367.6	422.1	567.5	592.1	3,670.00	12,004.30
	FTE produced by students who are: Majors within the department	9.7	10.3	15.2	25.6	25.6	201.1	2,049.10
Graduate	Majors outside the department, but within the college	43.5	28.3	29.3	41.1	40.3	138	247.2
	Majors outside the college	1.8	2.1	6.2	7.5	9.1	32.9	188.4
	Total	54.9	40.7	50.7	74.3	75	372	2,484.80
Total	FTE produced by students who are: Majors within the department	70.9	82.9	99.6	134	133.1	1,653.40	10,103.20
	Majors outside the department, but within the college	407.9	399.5	433.7	607.1	654.5	2,671.00	6,267.60
	Majors outside the college	50.8	49.4	52.5	65.3	74.3	614.8	7,781.30
	Total	529.6	531.8	585.8	806.5	861.9	4,939.20	24,152.10

The increase in FTEs by the Department is due to the increase in College enrollments as a whole, and an increase in the MIS majors in particular. The majority of teaching productivity of the Department is generated by courses required for each business major. The generated FTE based on courses required of all business majors have also substantially increased, by 50% (see Majors outside the department, but within the college).

#### **Instruction Effectiveness**

The Department, College, and University Student Perception of Teaching (SPOT) survey averages for 2016 vs 2020 are shown below. The survey questions include the following

- Q1. Covered what was stated in the courses' objectives.
- Q2. Communicated ideas effectively.
- Q3. Gave useful feedback on the coursework.
- Q4. Encouraged students to think critically.
- Q5. Showed respect for students.
- Q6. Rate your instructor's overall teaching effectiveness in the course.

SPOT SURVEY	ITOM Department					
Fall 2015 & Spring			Lower	Upper		
2016	University	College	UG	UG	GR	
Question 1	1.24	1.24	1.23	1.23	1.20	
Question 2	1.42	1.42	1.34	1.41	1.47	
Question 3	1.46	1.47	1.42	1.44	1.49	
Question 4	1.33	1.34	1.37	1.31	1.29	
Question 5	1.23	1.22	1.17	1.21	1.16	
Question 6	1.76	1.78	1.62	1.74	1.79	
# of sections	5844	862	23	57	34	
# of student						
responses	115915	21024	1000	1637	446	

	ITOM Department				
Fall 2019 & Spring			Lower	Upper	
2020	University	College	UG	UG	GR
Question 1	1.21	1.19	1.08	1.22	1.17
Question 2	1.39	1.35	1.12	1.40	1.34
Question 3	1.44	1.40	1.22	1.40	1.38
Question 4	1.29	1.27	1.18	1.28	1.24
Question 5	1.19	1.17	1.07	1.19	1.10
Question 6	1.68	1.64	1.30	1.69	1.58
# of sections	4924	827	21	57	35
# of student					
responses	85156	16582	660	1408	665

Per the Department SPOT results, the average rating of quality of instruction as measured by item #6 has consistently been better than the College and University averages. The Department results also show improvement in all categories for 2020 vs 2016. One must keep in mind that:

1) ITOM trains business students in Information technology – a STEM discipline which is generally considered a harder discipline by Business students, and 2) There are a number of additional factors (grades, size of fundable class, expectations of grade, type of course, time of class, etc.) that affect the quality of teaching and are not accounted for in this data.

#### **Average Class Size**

Undergraduate and Graduate courses were evaluated separately. The table below shows the average Lecture/Course Section Size Taught by faculty:

	2014-	2015-	2016-	2017-	2018-
	15	16	17	18	19
Undergraduate	57.6	64	64.5	68.1	68.5

#### Student-to-Faculty Ratio

The annualized Student FTE Produced Per FACULTY Instructional Person-Year (Student Faculty Ratio) is shown in the table below:

	2014-	2015-	2016-	2017-	2018-
	15	16	17	18	19
Undergraduate	46.9	57.7	73.8	99.5	104

#### Curriculum

The MIS major provides students with two path options, one more technical and the other more information and knowledge management oriented. Students also have a no path option. Below is the description of the MIS major.

Appendix 1a provides the MIS Undergraduate Degree Program Sheet.

#### **Lower-Level Prerequisite Courses**

Management Information Systems majors must first complete the Pre-Professional required courses for all Business majors and maintain a 2.50 grade point average (on a 4.0 scale) for admission eligibility. The Pre-Professional courses include the following.

Accounting I (Financial Accounting)	ACG 2021
Accounting II (Managerial Accounting)	ACG2071
Macroeconomics	ECO 2013
Microeconomics	ECO 2023
Methods of Calculus	MAC 2233
Introductory Statistics	STA 2023
Information Systems Fundamentals	ISM 2000

The University catalog states the following with respect to the admission criteria for majors in the College of Business.

 Attain a Pre-Business admissions GPA of 2.5 on the courses noted in parentheses below that are relative to success in business programs (ECO 2013, ECO 2023, ACG 2021, ACG 2071, MAC 2233, STA 2023, ENC 1101, ENC 1102 and ISM 2000) with grades of "C" or better. For Pre-Business admissions GPA calculation, only the highest grade of multiple attempts is used.

Note: Students who have attempted any of the Pre-Business admissions courses three or more times, including withdrawals ("W"), cannot be admitted to a selective business major.

- 2. Earn 60 credits.
- 3. Complete the foreign language entry (FLENT) requirements.
- 4. Major Declaration and Upper-Division Status Students must be admitted to a major (other than Pre-Business) no later than the semester when they earn 60 credits. A registration hold will prohibit enrollment beyond this threshold.

A student must be admitted to upper-division status in order to receive a baccalaureate degree from the College of Business, except for majors not eligible for the B.B.A. degree (General Economics and Health Administration).

Students may appeal denial of admission to a major through the academic petition process. For an appeal to have merit, students must explain new academic or personal information as well as extenuating circumstances. The evidence should show a student's case is stronger than the GPA evidence suggests.

#### **Management Information Systems Major**

Students who major in MIS are required to take Advanced Systems Analysis and Design (ISM 4133) and five other MIS courses (18 total credits) beyond Management Information Systems (ISM 3011) required of all Business majors. A grade of "C" or better is required in all major courses.

Students may choose to follow one of the two paths below or may choose courses from both paths in consultation with their advisor. The Information Technology path is the traditional MIS path that provides core technical skills needed to manage and design information technology in organizations. Students acquire the basic four technical skills of application development and programming languages, databases, data communications and system analysis. The Information and Knowledge Management path provides students with general, broad knowledge in information and knowledge management in organizations, digital products and service development, social media analysis, as well as project management. Graduates will have the

skills to analyze and lead technology-enabled products and services and consult organizations on digital products and services.

Additionally, students may choose to concentrate in Business Analytics or Cybersecurity but are not required to. If a student pursues the Business Analytics or Cybersecurity concentration, the student must take the four courses that constitute the chosen concentration. Concentration courses are noted below.

Information Technology Path		
Introduction to Computer Systems and Software Development	ISM 3230	3
Database Management Systems*	ISM 4212	3
Business Data Communications**	ISM 4220	3
Advanced Systems Analysis and Design	ISM 4133	3
Choose two of the following courses		
Special Topics	ISM 4930	3
Social Media and Web Technologies	ISM 4054	3
Project Management	MAN 4583	3
Information Technology and Operations Management Internship	ISM 4940	3
Introduction to Business Analytics*	ISM 3116	3
Data Mining and Predictive Analytics*	ISM 4117	3
Advanced Business Intelligence*	ISM 4403	3
Introduction to Cybersecurity**	ISM 4320	3
Management of Information Assurance and Security**	ISM 4323	3
Computer Forensics**	ISM 4324	3
Mobile Apps for Business	ISM 4053	3
Social Media and Web Analytics	ISM 4420	3

<sup>\*</sup> These courses constitute the Business Analytics concentration.

<sup>\*\*</sup> These courses constitute the Cybersecurity concentration.

Information and Knowledge Management Path		
Advanced Systems Analysis and Design	ISM 4133	3
Choose five of the following courses		
Special Topics	ISM 4930	3
Social Media and Web Technologies	ISM 4054	3
Project Management	MAN 4583	3
Information Technology and Operations Management Internship	ISM 4940	3
Introduction to Computer Systems and Software Development	ISM 3230	3
Database Management Systems*	ISM 4212	3
Introduction to Business Analytics*	ISM 3116	3
Data Mining and Predictive Analytics*	ISM 4117	3
Advanced Business Intelligence*	ISM 4403	3
Business Data Communications**	ISM 4220	3
Introduction to Cybersecurity**	ISM 4320	3
Management of Information Assurance and Security**	ISM 4323	3
Computer Forensics**	ISM 4324	3
Global Supply Chain Management	MAN 4597	3
Contemporary Issues of Digital Data Management	ISM 4041	3
Mobile Apps for Business	ISM 4053	3
Social Media Innovation	ISM 3007	3
Healthcare Information Systems	ISM 4381	3
Social Media and Web Analytics	ISM 4420	3

<sup>\*</sup> These courses constitute the Business Analytics concentration.

The headcount of MIS enrollments per concentration is given in the two tables below. MIS-none denotes No Concentration; MIS-MISB – Business Analytics Concentration; MIS-MISI – Cybersecurity Concentration

.,	incy com	cerreratio	J11							
Breakdowr	by Concer	tration				Breakdown	by Concenti	ration		
BBA						BS				
	MIS-none	MIS-MISB	MIS-MISI	MIS-MISC	TOTAL		MIS-none	MIS-MISB	MIS-MISI	TOTAL
AY 2014-15	247				247	AY 2014-15	27			27
AY 2015-16	266	10	14		290	AY 2015-16	14			14
AY 2016-17	257	37	37		331	AY 2016-17	14		1	15
AY 2017-18	213	47	72		332	AY 2017-18	10	1	2	13
AY 2018-19	202	56	85		343	AY 2018-19	4	2		6
AY 2019-20	207	54	86	5	352	AY 2019-20	1	1	2	4

<sup>\*\*</sup> These courses constitute the Cybersecurity concentration.

#### **Management Information Systems Minors and Certificates**

Currently 6 minors and 4 certificates are offered. Minors are aimed at degree seeking students while certificate programs are aimed at non-degree seeking students and professionals. They include the following: Management Information Systems Minor (MIS), Business Analytics Minor and Certificate (BUAN), Cybersecurity Minor and Certificate (ISEC), Operations Management Minor (OPMN), Healthcare Information Systems Minor and Certificate, and Digital Marketing Minor and Certificate. The last two are offered jointly with the Department of Management Programs and the Department of Marketing, respectively. All the minors are generating strong course enrollments which are shown below.

1st & 2nd Mi	inors - Und				
	BUAN	ISEC	MIS	OPMN	TOTAL
AY 2014-15	12	21	45	16	94
AY 2015-16	9	16	75	23	123
AY 2016-17	11	8	58	19	96
AY 2017-18	10	10	49	18	87
AY 2018-19	6	13	54	12	85
AY 2019-20	11	7	60	13	91

#### Pedagogy

The ability to think and process information is a vital skill for businesses. The purpose of developing new pedagogical approaches is to improve the challenges we provide for students to think analytically and critically.

In recent years, the new pedagogical approaches undertaken primarily involve experiential learning, which is focused on student engagement and is more broadly defined as an approach in which students actively engage in the learning process. Many classes include individual or group student projects aiming to solve a real business problem with real data from a real company. To implement this student-centered learning pedagogy, ITOM faculty employ many pedagogical and technology-based innovations such as

- **Simulation-Based Learning** in the operations, supply chain management, and project management courses using leading-edge web-based simulations from Harvard Business School
- Case Studies and Case Analyses. Graduate classes typically have one Harvard case study each week, along with a semester-long term paper involving an analysis of a specific company's processes, or a multi-week simulation managing the supply chain for a company, with a report analyzing the decisions the group made each round. Company tours and guest speakers are incorporated in the curriculum as well to see the course material applied to a real business. For example, each team in a class designs a production or information process with the aim of being the most profitable for company, and then they must analyze how they could it. Each activity is followed by a written analysis to help students better understand the learning goals of the activity as well as better understand the course material as it applies to business.

- **Individual or Group Project.** In many classes all course students are required to do individual company-based projects driven by the current challenges they face at work. For example, an OM graduate class worked to help the Human Powered Submarine Club of FAU to better organize themselves as they prepared for the national championship in the human powered submarine competition. Projects typically include consulting projects with local firms, business case requirement, business plan requirement, and so on. Many of these successfully enter and are showcased at the Business Plan Competition, a main entrepreneur initiative at the College of Business. Undergraduate students are also involved in real world group projects. Practical hands-on projects are utilized to ensure that students are not only learning the fundamentals of the course material, but they are also able to utilize the principles learnt in a real-world problem. For example, in Mobile Apps for Business (ISM 4053) they build Mobile apps; in the Social Media and Web Technologies course (ISM 4054), individual students perform an in-depth analysis of two existing websites and offer suggestions for improvement. They also work in groups to plan and create or re-design a website for an organization or a company. Similarly, System Analysis and Design (ISM 4133) is a project-based class in which students in teams analyze and create or improve an Information Systems in a real-world company
- New Software Tools and Mobile/Social Technologies into the curriculum. For example, Evernote (social app) is used for undergraduate projects in an experiential product and service design project. Other integrated information technologies include Business analytics tools, such as Tableau, R, Google Analytics, Power BI, programming languages such as Python and Java, Web 2.0 tools (wiki, blogs, Facebook, etc.), web-based activities, online assessment and collaboration, synchronization of virtual and oncampus course, student website creation, etc. Such instructional innovations are recognized via presentation at a premier academic conference, obtaining the *Quality Matters* certification for the majority of our classes, and publication in a top teaching-research journal, *Journal of Information Systems Education*.
- Adopting Academic Service Learning (ASL) by incorporating community work into the
  undergraduate curriculum, giving students real-world learning experiences that
  enhancing their academic learning while providing a tangible benefit for the local nonprofit organizations such as the CROS Ministries Delray Beach Community Food Pantry.
  Information Technology and Operations Management Internship (ISM 4940), Supply
  Chain Management (MAN 4597), Business Software Systems Development Project (ISM
  4243), and Social Media and Web Technologies (ISM 4054) are all ASL classes.
- Adaptation of the Universal Teaching Method of Jacotot, Rancière and Biesta. The goal
  of this methods is to provide a space for deliberative democracy and collaborative selflearning, to create a space in which students can do research (FAU's QEP initiative) and
  to minimize stultifying explanation by the instructor. Students are asked to rewrite the
  class text in class discussions (F2F format) and in group wikis (F2F and online formats).
  The rewritten text is the basis for some of the exams. F2F sections are required to
  produce a creative video (in groups) related to course topics. Assessment is based upon
  twelve individual wiki assignments, twelve MC quizzes and two essay/MC exams, and a

- group project (F2F only). Students can take on an optional explanatory basis if they choose explanatory videos are available on the course Blackboard site.
- Experiential Learning: Internships, Corporate Projects, and Research-Intensive Courses As part of the curriculum overhaul in 2012, to encourage career development and real-world experience for its majors, the Department created 2 Internships for credit courses: Information Technology and Operations Management Internship ISM 4940 for undergraduate students and ISM 6942 for graduate students. In collaboration with the local business community, especially the ITOM Advisory Board, the Department has placed 218 students since 2014, which constitutes developing opportunities for more than 10% of the MIS majors. More than 100 students were hired permanently following their internships. We identified 5 to 10 primary local organizations that hire our students on a regular basis. We have streamlined the process to place students. As part of this process, we work with students to help them create better resumes and improve their interviewing skills.

Global Supply Chain Management (MAN 4597) and Advanced Systems Analysis and Design (ISM 4133), Social Media and Web Technologies (ISM 4054) are courses which regularly integrate real world **corporate projects**. Students work in teams of 2-3 on a real company project development in strong collaboration with the industry partners. By the end of the course they complete the project and the industry partners evaluate the project and the student work.

The Department faculty are active participants in the University's Quality Enhancement Program (QEP). The QEP initiatives focus on undergraduate research and include mentoring multiple student groups to facilitate their participation in the Office of Undergraduate Research and Inquiry's (OURI) Annual Undergraduate Research Symposium, serving on OURI administrative committees, and serving as reviewers and judges in the Annual Undergraduate Research Symposium and other OURI events. Several ITOM faculty members have received curriculum grants from OURI to develop their courses as **Research-Intensive** courses. These courses incorporate a team project a method, a technology or data from industry or research partners - to solve a research problem. Students work in teams and present their projects in class. The best projects are selected to be presented in the Undergraduate Research Symposium or a research paper. Examples of these courses include Global Supply Chain Management (MAN 4597), Advanced Systems Analysis and Design (ISM 4133), Operations Management (MAN 3506), Data Mining and Predictive Analytics (ISM 4117), Computer Forensics (ISM 4324), Mobile Apps for Business (ISM 4053), Business Software Systems Development Project (ISM 4243) where students build a 3-tier Web site, Artificial Intelligence for Business (ISM 4930) where students build Machine Learning models with IBM Watson, and others. The above-mentioned courses are examples of courses in which we provide experiential learning and are not mutually exclusive in terms of pedagogical approaches.

#### **E-Learning Modes of Delivery**

- Lecture Capture Video Streaming (LCVS) Delivery. In this course delivery mode, lectures are transmitted live and recorded. Students choose to watch synchronously or at a later time. Due to the large number of students in the lecture capture sections, teaching assistants provide access to face-to-face and e-tutoring sessions as well as test preparations, pre-test and post-test reviews. The students are provided with an abundance of creative materials to master the lessons: challenging problem sets, worksheets, voice-over PowerPoint, notes, tutorials, online graded assignments and regular quizzes. The inclusion of current topical issues in the news, such as quantitative analytics pertaining to elections and quantitative tools available on popular websites, enhance the student's' understanding of the business relevance of the course. Providing adequate ancillary materials supports the increased demand for assistance required to pass the course and to accommodate the different learning styles of the students as they pursue confidence and expertise in quantitative skills.
- Online Delivery. ITOM faculty have received extensive training from the University's Center for eLearning to build and deliver effective, innovative, challenging course material and stimulate student learning through a variety of methods appropriate for the online delivery. Use of discussion boards, individual or group projects, video materials, wikis and blogs, and many others innovative methods are incorporated in the online course delivery. A majority of the ITOM faculty have successfully completed the eDesign certification for their online courses, which is the Center for eLearning's initiative to meet national standards. In addition, more than half of our faculty have obtained the Quality Matters certification for the online classes they teach.

#### Scope of Institutional Contributions

The Department contributes to the Intellectual Foundations Program (i.e., General Education Program) by offering Information Systems Fundamentals (ISM 2000) for freshmen. In addition, the Department offers service core courses to the College of Business Graduate and Undergraduate programs, such as Management Information Systems (ISM 3011), Operations Management (MAN 3506), Operations Management Applications (MAN 4504), Quantitative Methods in Administration (QMB 3600), Management of Information Systems and Technology (ISM 6026), Operations Management (MAN 6501), Business Process Improvement Management (MAN 6525), Project Management (MAN 6581), Supply Chain Management (MAN 6596), Data Analysis for Managers (QMB 6603), Research Methods 1 (QMB 7565).

The Department offers several interdisciplinary programs:

- The MS in Information Technology and Management is jointly offered with the Department of Computer Science and Computer Engineering in the College of Engineering and Computer Science; and
- Two minors and certificates in Healthcare Information Systems, offered jointly with Management programs, and Digital Marketing, offered jointly with Department of Marketing.

#### **Student Demographics**

One of the points of pride of the MIS program is the diversity of student ethnicity and gender. Over the review period, the number of Black (non-Hispanic) MIS students increased from 16.9% in 2014-2015 to 24% in 2019-2020. As in every technical and STEM discipline, we are experiencing a shortage of female students interested in MIS, however the number of female students did increase by 5% over the review period. The Department is trying to increase the number of female majors through vigorous recruitment efforts. In the courses required of all Business majors, Introduction Information Systems Fundamental (ISM 2000) and Management Information Systems (ISM 3011) we are trying to bring enthusiasm and interest as much as possible.

		BBA, BS (N	4IS)			
	AY 2014-	15			AY 2019-	20
	COUNT	%			COUNT	%
Amer Indian/Alaska Native	1	0.4%	Α	mer Indian/Alaska Native	0	0.0%
Asian (non-Hispanic)	25	9.4%		Asian (non-Hispanic)	23	6.9%
Black (non-Hispanic)	45	16.9%		Black (non-Hispanic)	80	24.0%
Hispanic	71	26.7%		Hispanic	95	28.4%
ific Islander (non-Hispanic)	0	0.0%	acific	c Islander (non-Hispanic)	0	0.0%
Two or More Races	5	1.9%		Two or More Races	9	2.7%
White (non-Hispanic)	118	44.4%		White (non-Hispanic)	118	35.3%
Unknown	1	0.4%		Unknown	9	2.7%
	266				334	
Female	69	25.9%		Female	101	30.2%
Male	197	74.1%		Male	233	69.8%
	266				334	

#### **Scholarships**

The Scholarship Fund and availability of scholarships is centralized at the College of Business (COB). These are now posted on the College web site. The scholarship opportunities are few and there is much to be desired on this front. The Department has tried to engage the ITOM Advisory Board to solicit and generate some scholarships but the results so far are not encouraging.

#### **Advising Procedures**

During their freshman year and their first 60 credit hours, students generally receive advising by the University Advising Services office. To facilitate their efforts, Department Chair visits both the Admissions office and the Advising Services office twice a year to reinforce staff awareness of the MIS major, and to advise them to direct interested students to contact the Chair for further information. Freshmen and sophomores who list an interest in a specific Business major during their orientation and subsequent sessions with University advisors are formally categorized as Pre-Business majors. Until they have successfully passed the required lower

level seven Pre-Business foundation courses, the records of these Pre-Business majors show their major of interest as a concentration. Thus, the challenge for all departments in the College is to establish communication with students interested in their respective majors during the student's first two years at FAU. As soon as the Pre-Business students are handed off from the University to the College's Student Academic Services office, advisors provide direction on the appropriate courses to take to ensure timely graduation. The staff of the Student Academic Services office provide advising to all undergraduate and graduate students in the College. Faculty do not have formal responsibility for advising students, although any number of faculty do provide guidance informally.

ITOM has built a framework to regularly communicate with the COB Advisors' team to inform them about the program changes, to clarify elements of our complex program that includes concentrations and paths and give more information about the minors as well. The Chair attends meetings the College advisors from the Student Academic Services office every semester to answer questions and give clarifications and recommendations for improvement in advising MIS students. In addition, the Chair hosts a Holiday Lunch during the month of December whose purpose is, in relaxed atmosphere, to enhance the awareness of the importance of their job and to express appreciation of their work. The event is used to further clarify the program.

ITOM has also appointed a Program Director who is also a COB Advisors' liaison, a faculty member who has intimate knowledge about our program and regularly visits the Advisors' office, takes their questions and difficulties and conveys them to the ITOM Chair. The Program Director also promotes our program and meets with students to help them choose the best path if they consider MIS undergraduate or graduate program.

Finally, the ITOM Chair and the Program Director do one-on-one advising for anything related to MIS – careers, specific course questions, internships, paths and opportunities, etc.

Mentorship Program for Management Information Systems (MIS) Students: ITOM has a successful innovative mentorship program for the MIS majors while strengthening relationships between academia and industry in the information technology sector. ITOM Advisory Board members, executives from prominent firms in South Florida, have been selected to serve as mentors for this program. Teams of three undergraduate students will have exclusive access to a designated board member and forge a close mentorship relationship with that member. Each semester, board members and their respective teams will conduct meetings in an informal setting such as online chat, coffee shop, or at the executive's workplace. Board members will provide guidance and informational interviews with the students, answer questions on how to best develop their careers and present themselves and help develop their resumes and skills. With exclusive access to company executives, students will gain the opportunity to learn about the local industry, what type of jobs and skills are most sought after, what type of work MIS professionals typically perform in a company, and how they can build successful portfolios.

#### Retention and Graduation Rates

The retention rate is the FL SUS Metric #5. It is defined as the 2<sup>nd</sup> year retention/persistence rates of students with a Grade Point Average (GPA) above 2.0 and shows how many students re-enrolled the following year. Graduation plus Retention define the Persistence. The following table represents the retention rates data

Retention Rate		
MIS		
	MIS	Student Count
Fall 2015	100.0%	1
Fall 2016	100.0%	3
Fall 2017	100.0%	6
Fall 2018	50.0%	2
Progress Rate		
MIS		
	MIS	Student Count
Fall 2015	100.0%	1
Fall 2016	100.0%	3
Fall 2017	100.0%	6
Fall 2018	50.0%	2

**Graduation rates.** The 6<sup>th</sup> year graduation rates for full-time and part-time First-Time-In-College (FTIC) students is FL SUS Metric #4. This metric is based on the percentage of first-time-in-College (FTIC) students who started in the Fall (or summer continuing to Fall) term and were enrolled full-time in their first semester and had graduated from the same institution by the summer term of their fourth year. FTIC includes 'early admits' students who were admitted as a degree-seeking student prior to high school graduation. The Current Fall 2016 Cohort is an ongoing rate. As students from this cohort graduate, the rate will increase. End of Summer 2020 is the latest this cohort can graduate within 4 Years. The following table represents the graduation rates data

4yr-gradua	ition rate (F	BBA & BS (N	ΛIS)	
2012-13	2013-14	2014-15	2015-16	2016-17
28.6%	37.5%	44.8%	60.0%	45.7%

6yr-gradua	ition rate (F	BBA & BS (N	ΛIS)	
2010-11	2011-12	2012-13	2013-14	2014-15
81.8%	77.8%	91.4%	93.8%	96.6%

The following are some strategic initiatives aimed at increasing student success and retention and graduation rates

- Strengthen the Mentor program with the ITOM Advisory Board that will help students understand the job market environment, their job responsibilities as IT workers, and build competitive skills to best present themselves in the market. Each advisory board member will mentor a team of 3 students.
- Establish a comprehensive data gathering initiative of the main reasons MIS students do not graduate on time or leave. This includes developing surveys and interviewing individually students.
- Leverage the thriving and energetic MIS Students Association (MISA) to motivate the students and connect with industries willing to hire them
- Keep strong focus on the accelerated/combined degree graduate program to enable undergraduate students to continue their graduate studies in our MSITM program.

#### Placement Rates/Employment Profile

ITOM and COB do not have their own measurements of placement rates and average beginning salary. Historically, MIS Bachelor graduates have among the highest salaries among Business majors, and in an environment of high industry demand for IT talent, have high placement rates. The table below is the Florida Education and Training Placement Information Program (FETPIP), http://www.fldoe.org/fetpip/ data that serves to determine the number and percentage of employed graduates from FAU. The MIS major' placement data are available for 2014-2015, 2015-2016, and 2017-2018. FETPIP has been used by the Florida Legislature to distribute Performance-based funds to universities. Although FETPIP data has limitations, it provides a uniform method of measurement for all universities.

Year	Major	Level	Grads	Employed	%	FT Average Qt
					Employed	Earnings
2014-	Mgmt. Info.	Bachelor's	85	65	76%	\$12,402
2015	Systems/Busi Data					
	Proc. 521201					
2015-	Mgmt. Info.	Bachelor's	91	71	78%	\$12,465
2016	Systems/Busi Data					
	Proc. 521201					
2017-	Mgmt. Info.	Bachelor's	-	81	72%	\$11,117
2018	Systems/Busi Data					
	Proc. 521201					

#### Student Recruitment and Retention

ITOM's Management Information Systems (MIS) is a STEM Discipline,

http://iea.fau.edu/inst/inventory712.pdf. **The Department has built an extensive multifaceted** framework to recruit and excite students to major in MIS. Below are the efforts ITOM regularly undertakes to recruit more students to the MIS discipline.

- Engage Local Industry. ITOM has a very active Advisory Board whose members are local
  industry leaders in Information Technology (IT). Several of them have taken proactive
  initiatives to leverage their connections with local high schools and talk to and mentor
  high school students toward MIS degree at ITOM, FAU
- Invited Speakers. Each class taught by ITOM once a semester has an invited speaker
  who is an industry leader to talk about IT and its importance in organizations and job
  opportunities.
- Strong, attractive Information Systems (ISM 2000) Freshman class and access to MISA.
  We have recruited excellent instructors who are student oriented, passionate and
  dedicated to students. The class excites early on students to pursue IT career and
  studies. The students are offered to attend the MISA student association events and
  hear industry leaders talk about the demand for MIS graduates in the workforce.
- MISA the MIS Student association. ITOM has an energetic and dedicated Faculty Advisor for the Management Information System Association (MISA). In addition to mentoring student officers and students, he has developed significant relationships with local companies. With their weekly events, Information Sessions, and company tours that have become increasingly popular, the Faculty Advisor helps bridge MISA and our students with local companies and helps promote our students to the industry leaders. As a result of the efforts and the enthusiasm of the student, the MISA group is recognized as the most vibrant and active student groups by the FAU Career Services. Many of his guest speakers and the leaders he connects with proceed to hire our students full time or as interns.
- Company Tours for MIS students. Advisory Board members organize company tours for students. Some recent very successful tours were at Citrix for the students in the Data Communications class, organized by Paul Martine, CIO of Citrix, as well as with the MIS Student Association members at Citrix, NCCI, Modernizing Medicine, Rocket Matter, City Furniture, and others.
- COB Advisors. ITOM is closely working with COB advisors and educating them about the
  degree specifics. We appointed ITOM liaison who works directly with advisors and
  answers their questions. The ITOM Chair conducts at least 2 meetings each semester
  with all advisors to inform them of the curriculum specifics and answer their questions
  about the program
- Orientation session for the newly declared MIS majors. ITOM Chair gives orientation session to the newly declared MIS majors
- Internships and Job Opportunities. Each semester the ITOM Chair uses a survey to build a mailing list of MIS students who are interested in Internships and Job Opportunities. Advisory Board members commit to opening Internship opportunities for ITOM students. All job opportunities that reach ITOM reach the students by direct emailing to them
- Alumni reach-out. ITOM created a Linked-in ITOM Alumni group. Alumni will be featured on our web site and will be invited to the classrooms to connect to students and help.

- Working with LLC communities. ITOM gives 3-4 lectures per semester to Freshmen LLC communities about the benefits of an IT degree
- Reach to Freshmen and undecided pre-business majors. Recently explored channels to reach to freshmen through FreshWeek and similar events where the ITOM can present the MIS program. Also, we plan in the Fall semester to have a pizza event for the pre-business majors to present to the MIS degree
- Direct Efforts to High Schools. The ITOM Chair has built contacts with FAU High and other neighboring schools through top Educational Official in Palm Beach and Broward counties, Jody Gleason, Executive Director of the Education Commission of Palm Beach County and Doris Bodnar, Chair, Broward County NAF Academies Advisory Board, Chair, South Florida NAF Tri-County Advisory Board, and NAF Advisory Board Leadership Council (ABLC). Through them, the Chair and the Program Director gave several in house Information Sessions and talks to the National Academy of Learning students interested in IT. Intense efforts are made to connect to High School's Guidance Counselors to present the ITOM programs to them.
- Efforts through Palm Beach Workforce Alliance and Palm Beach Tech. The ITOM Chair and the ITOM Program Director are members of the Palm Beach Workforce Alliance's IWDI (Infotech Workforce Development Initiative) and Palm Beach Tech, whose goal are to guide the educational institutions to establish common talent/skill development and recruitment goals and strategies for training in IT-related disciplines. The Committee developed Talent pipeline with IT programs offered in IT in Palm Beach County. This document is disseminated directly to Guidance Counselors.
- **Student Mentoring.** Each member of the AB is an individual mentor of a group of 3-4 MIS students and guides them through their course choices, resume building, presenting themselves, and choosing a career focus. This is accomplished through Skype sessions, coffee chats and other formats best fit to students.

#### **Graduate Programs**

In 2009 the Masters program MSITM (Master of Science in Information Technology Management) was created and launched. It is offered jointly with the College of Engineering. The Master of Science with Major in Information Technology and Management (MSITM) is jointly offered by the Department of Computer & Electrical Engineering and Computer Science (CEECS) in the College of Engineering and Computer Science and the Department of Information Technology and Operations Management (ITOM) in the College of Business. Designed for highly motivated individuals with computing and/or managerial backgrounds, the program aims to prepare students for a management career in the area of information technology in organizations. To allow for maximum flexibility in career aspirations, students can select from two options: Advanced Information Technology, emphasizing the technical aspect of organizational IT systems; and Information Technology Management, focusing on the management issues of IT in organizations. The program has grown significantly in enrollments and is now a thriving graduate program at the College.

In Fall 2013 we launched the **Accelerated Combined 5-year BBA-MSITM**. The Accelerated (B.B.A. or B.S.) to M.S. prepares highly motivated students for careers as professional

information technologists through an integrated, five-year, 150-credit program that leads to the joint award of a BBA or BS with Major in Management Information Systems and a Master of Science with Major in Information Technology and Management. The program begins in the senior year and is based on the Boca Raton campus. Students complete a rigorous curriculum, take their Information Technology classes together as a cohort group and participate in professional development activities. Students apply for the program in the spring semester of their junior year and must complete 150 credits in specified courses, satisfy all University and College major degree requirements for each academic program, maintain a cumulative and major GPA of at least 3.0 and satisfy all other requirements of the accelerated program. Students are awarded each degree separately upon completion of the individual degree requirements.

In the event a student enrolled in the Combined degree program is unable to complete the M.S. program credits, the student will be awarded the B.B.A. or B.S. degree upon completion of the undergraduate requirements.

Appendix 1e provides the Assessment plan and results for Graduate MSITM program for the academic year 2018-2019.

In 2020 ITOM launched the Master of Science in Supply Chain Management. In January 2021 will be the first cohort of admitted students.

#### **Admissions Criteria**

To be admitted to the MSITM program applicants must have:

- An undergraduate degree in Computer Science, Information Engineering Technology or an IT-related field of study. Applicants with another undergraduate degree and documented work experience of two or more years in an IT function will be evaluated as well;
- An undergraduate GPA of 3.0 or higher;
- GMAT/GRE A combined score (verbal + quantitative) of at least 295 on the Graduate Record Examination (GRE) or a GMAT score of 500 or higher. GRE scores more than five years old are normally not acceptable
- International students from non-English-speaking countries must be proficient in written and spoken English as evidenced by a score of at least 500 (paper-based test) or 213 (computer-based test) or 79 (Internet-based test) on the Test of English as a Foreign Language (TOEFL) or a score of at least 6.0 on the International English Language Testing System (IELTS); and
- One to two page statement of candidate's objectives
- Meet other requirements of the FAU Graduate College

#### Admissions Criteria for the Accelerated Dual BBA-MIS Degree Program

Students apply to the program in the spring semester of their junior year, during which they should complete the prerequisite courses below. To be considered, students must have a cumulative undergraduate GPA of at least 3.0 and an Information Technology GPA of at least

3.0. Students must also complete an on-site essay and interview with a member of the Information Technology and Operations Management Accelerated Undergraduate/Graduate Programs Committee.

Prerequisites for Admission to Combined Program (Junio	or Year)	
Management Information Systems (fall)*	ISM 3011	3
Introduction to Computer Systems and Software Development (fall)	ISM 3230	3
Business Data Communications (fall)	ISM 4220	3
Advanced Systems Analysis and Design (spring)	ISM 4133	3
Database Management Systems (spring)	ISM 4212	3

<sup>\*</sup> All College of Business undergraduate students, except Accounting majors, must take this course.

In addition, Advanced Business Analytics (ISM 6405) is required during undergraduate studies and is used to fulfill the required B.B.A. or B.S. 120 degree credits. In the event that a student is unable to complete the 30 M.S. program credits, excluding ISM 6405, during the following four semesters after receiving the B.B.A. or B.S. degree, the student will be dismissed from the program.

Students who successfully complete the first year of the accelerated program are admitted to graduate school in the fall of the second year. The financial aid status of the student changes to graduate at this time. Students who have not maintained the requirements are not automatically admitted to graduate school. These students may apply to graduate school by taking the GMAT and going through the traditional graduate school admission process. In the event that a student completes the undergraduate degree requirements but is unable to complete the graduate degree requirements, the student, upon receiving permission from the College of Business, will be awarded only the undergraduate degree.

## **Enrollment Information**

Enrollment information for the MSITM program is given in the table below:

Enrollment by Major unduplicated count					
MS					
	ITMT				
AY 2014-15	38				
AY 2015-16	44				
AY 2016-17	56				
AY 2017-18	67				
AY 2018-19	67				
AY 2019-20	85				

#### FTE and the SCH Production

Fulltime Equivalent (FTE) is a measure of instructional activity based on the number of student credit hours (SCH). Annualized FTE is based on the standard national definition and calculated as the undergraduate & graduated SCH divide by 30 and 24, respectively. The tables below provide the FTE and SCH for the graduate MSITM program.

	Grad Level 1	1 (Masters	)			Grad	d Leve	2 (PhD)		
		Non-		Non-				Non-		Non-
	State	State	State	State		Stat	e	State	State	State
	Fundable	Fundable	Fundable	Fundable		Fund	dable	Fundable	Fundable	Fundable
	SCH	SCH	FTE	FTE		SCH	l	SCH	FTE	FTE
2014-15	1734	1122	72	46.75	2014	4-15	24	0	1	0
2015-16	1278	1359	53	56.63	2015	5-16	24	0	1	0
2016-17	1572	2022	66	84.25	2016	6-17	51	0	2	0
2017-18	1728	2202	72	91.75	2017	7-18	54	0	2	0
2018-19	1770	2451	74	102.13	2018	8-19	30	0	1	0
2019-20	1995	2739	83	114.13	2019	9-20	39	75	2	3.13

ITOM provides the majority of the instruction of core business courses required for all business majors. ITOM produces 15.5% of the College's total Graduate I Annualized State-Fundable FTEs. It is the third largest Graduate I FTE producer in the College.

The MSITM program has now seen one of the fastest growth in the College: 128% increase in enrollments since 2013. In Fall 2013 we launched the Accelerated Combined 5-year BBA-MSITM program. The accelerated program is now the preferred way of the MIS students to enter the graduate MSITM program.

#### **Average Class Size**

The average Lecture/Course Section Size Taught by Faculty is given in the table below:

	2014-	2015-	2016-	2017-	2018-
	15	16	17	18	19
Graduate	15.3	16.1	15.6	13.2	14.2

# Student-to-Faculty Ratio

The annualized Student FTE Produced Per FACULTY Instructional Person-Year (Student Faculty Ratio)

	2014-	2015-	2016-	2017-	2018-
	15	16	17	18	19
Graduate	5.4	4.8	7.0	10.1	9.9

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#### Curriculum

Appendix 1b provides the MSITM Graduate Degree Program Sheet. Details follow below. Students in the Advanced Information Technology and Computer Science Data Analytics concentrations are required to complete 30 graduate-level credits, or 10, 3-credit courses (5000 level or higher), with a 3.0 GPA or better to graduate. Students in the Information Technology Management and Business Analytics concentrations are required to complete 33 graduate-level credits, or 11, 3-credit courses (5000 level or higher), with a 3.0 GPA or better to graduate. Students in the Advanced Information Technology and Computer Science Data Analytics concentrations will be awarded the degree by the College of Engineering and Computer Science, while those in the Information Technology Management and Business Analytics concentrations will have their degrees awarded by the College of Business.

#### **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 following CEECS courses.  Additional CEECS courses may be used as electives with prior approval of the CEECS advisor:					
Computational Foundations of Artificial Intelligence	CAP 5625				
Applied Machine Learning	CAP 6610				
Data Mining and Machine Learning	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				

Computational Advertising and Real-Time Data Analytics	CAP 6807
Social Network and Big Data Analytics	CAP 6315
Sensor Networks and Smart Systems	CNT 5109
Mobile Application Development	CAP 5675
Advanced Internet Systems	CAP 6819
The last two electives must be chosen from the following ITOM co	urses:
Information Technology Project and Change Management	ISM 6316
Management of Information Assurance and Security	ISM 6328
Enterprise Information Technology Service Management	ISM 6368
Business Innovation with Artificial Intelligence	ISM 6427C
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
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 seven 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			
Enterprise Information Technology Service Management	ISM 6368			
Web-Based Business Development	ISM 6508			
Information Technology Sourcing Management	ISM 6509			
Graduate Business Communication Applications	GEB 6215			
Students must take one elective from the following ITOM courses:				
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			
Enterprise Information Technology Service Management	ISM 6368			

Business Innovation with Artificial Intelligence	ISM 6427C
Special Topics	ISM 6930
Data Management and Analysis with Excel	QMB 6303
In addition, students must take three electives from the following concollege of Engineering and Computer Science. Additional CEECS courselectives with prior approval of the CEECS advisor:	•
Computational Foundations of Artificial Intelligence	CAP 5625
Applied Machine Learning	CAP 6610
Data Mining and Machine Learning	CAP 6673
Software Maintenance and Evolution	CEN 6027
Software Testing	CEN 6076
Computer Data Security	CIS 6370
Mobile Computing	CNT 6517
Theory and Implementation of Database Systems	COP 6731
Topics in Computer Science	COT 5930/6930
Information Retrieval	CAP 6776
Natural Language Processing	CAP 6640
Introduction to Data Science	CAP 5768
Cloud Computing	CEN 5086
Software Engineering	CEN 5035
Computational Advertising and Real-Time Data Analytics	CAP 6807
Social Network and Big Data Analytics	CAP 6315
Introduction to Neural Networks	CAP 5615
Foundations of Vision	CAP 6411
Software Architecture and Patterns	CEN 6085
Sensor Networks and Smart Systems	CNT 5109
· · · · · · · · · · · · · · · · · · ·	

# Computer Science Data Analytics **Concentration** (30 credits)

Students are required to take the following three courses offered by the Computer and Electrical Engineering & Computer Science (CEECS) 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 CEECS electives, at least two of Data Analytics group:	which are from the CEECS
CEECS Data Analytics electives are listed below. Additional CEECS co	urses may be used with
prior approval of the CEECS advisor.	
Applied Machine Learning	CAP 6610
Data Mining and Machine Learning	CAP 6673
Introduction to Neural Networks	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
Other CEECS electives are listed below. Additional CEECS courses manapproval of the CEECS advisor.	ay be used with prior
Cloud Computing	CEN 5086
Computer Data Security	CIS 6370
Sensor Networks and Smart Systems	CNT 5109
Mobile Application Development	COP 5675
Advanced Internet Systems	COP 6819
Computational Foundations of Artificial Intelligence	CAP 5625
The last three electives must be chosen from the following ITOM co	urses:
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
Business Innovation with Artificial Intelligence	ISM 6427C

Special Topics ISM 6930
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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.

# 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			
Introduction to Business Analytics and Big Data	ISM 6404			
Data Mining and Predictive Analytics	ISM 6136			
Advanced Business Analytics	ISM 6405			
Business Innovation with Artificial Intelligence	ISM 6427C			
Social Media and Web Analytics	ISM 6555			
Graduate Business Communication Applications	GEB 6215			
Students must take one elective from the following ITOM courses:				
Data Management and Analysis with Excel	QMB 6303			
Information Technology Project and Change Management	ISM 6316			
Information Technology Sourcing Management	ISM 6509			
Web-Based Business Development	ISM 6508			
Mobile Apps for Business	ISM 6058			
Management of Information Assurance and Security	ISM 6328			
Enterprise Information Technology Service Management	ISM 6368			
Special Topics	ISM 6930			
In addition, students must take three electives from the following College of Engineering and Computer Science. Additional CEECS coelectives with prior approval of the CEECS advisor.	-			
Computational Foundations of Artificial Intelligence	CAP 5625			
Applied Machine Learning	CAP 6610			
Data Mining and Machine Learning	CAP 6673			
Information Retrieval	CAP 6776			
Natural Language Processing	CAP 6640			
Computational Advertising and Real-Time Data Analytics	CAP 6807			
Social Network and Big Data Analytics	CAP 6315			
Introduction to Neural Networks	CAP 5615			
Deep Learning	CAP 6619			
Data Mining for Bioinformatics	CAP 6546			

Web Mining	CAP 6777
Advanced Data Mining and Machine Learning	CAP 6778
Big Data Analytics with Hadoop	CAP 6780
Computer Performance Modeling	CEN 6405
Introduction to Data Science	CAP 5768

#### **Internships and Corporate Projects**

As part of the curriculum overhaul, to encourage career development and real-world experience for its graduate students, ITOM created Internship for credit course ISM 6942 for graduate students. In collaboration with the local business community, especially the ITOM Advisory Board, ITOM placed more than 85 graduate students since 2014. More than 20 students were hired permanently following their internships. We identified five to ten primary local organizations that hire our students on a regular basis. As part of this process, we work with students to help them create better resumes and improve their interviewing skills.

#### Pedagogy

This section is identical to the section under the Undergraduate/Baccalaureate Programs.

#### Scope of Institutional Contributions

ITOM provides service core courses to the College of Business Graduate MBA and Ph.D. programs, such as Management of Information Systems and Technology (ISM 6026), Operations Management (MAN 6501), Business Process Improvement Management (MAN 6525), Supply Chain Management (MAN 6596), Project Management (MAN 6581), Data Analysis for Managers (QMB 6603), Data Management and Analysis with Excel (QMB 6303), Research Methods 1 (QMB 7565).

Our graduate MSITM program is offered jointly with the College of Engineering, Department of Computer Science and Computer Engineering

#### **Student Demographics**

		MS (ITMT)	)			
	AY 2014-1	.5			AY 2019-2	.0
	COUNT	%			COUNT	%
Amer Indian/Alaska Native	0	0.0%	A	Amer Indian/Alaska Native	0	0.0%
Asian (non-Hispanic)	3	7.5%		Asian (non-Hispanic)	12	14.1%
Black (non-Hispanic)	6	15.0%		Black (non-Hispanic)	14	16.5%
Hispanic	9	22.5%		Hispanic	23	27.1%
acific Islander (non-Hispanic)	0	0.0%	acifi	ic Islander (non-Hispanic)	0	0.0%
Two or More Races	3	7.5%		Two or More Races	4	4.7%
White (non-Hispanic)	19	47.5%		White (non-Hispanic)	32	37.6%
Unknown	0	0.0%		Unknown	0	0.0%
	40				85	
Female	9	22.5%		Female	28	32.9%
Male	31	77.5%		Male	57	67.1%
	40				85	

One of the great advantages and points of pride of our program is that it is age and ethnicity diverse program providing many opportunities to younger and older students, and those with diverse ethnical and national background. We have seen impressive diversity increase when we compare the 2014 to 2020 data: Asian students grew from 7.5% to 14%; most importantly, female students in the program have grown from 22.5% to 32.9%. This is a major achievement since in the last review cycle this was pointed as a major opportunity to address. We believe our vigorous recruitment effort, in-class education at the core Information Systems Fundamentals (ISM 2000) and Management Information Systems (ISM 3011), and our superb MISA student association helped build buzz and enthusiasm and interest (see **Student Recruitment** in the Baccalaureate section). We see the efforts paying off in recruitment of female students.

#### **Scholarships**

Our graduate students are offered Teaching Assistantships. They teach or tutor for undergraduate MIS courses up to 20 hours per week. If they are enrolled full time and are also full time TAs, they receive maximum tuition waiver as determined by the FAU Graduate College.

#### **Advising Procedures**

ITOM has built a framework to regularly communicate with the COB Graduate Advisors' team and share the advising responsibilities and Study Plan building for the graduate students. We have had a dedicated Program Director whose responsibilities included advising, recruitment and mentoring graduate students. The Chair attends Advising meetings every semester to answer questions and give clarifications and recommendations for improvement in advising MIS students. In addition, the Chair hosts a Holiday Lunch during the month of December whose purpose is in relaxed atmosphere to enhance the awareness of the importance of their

job and to express appreciation of their work. The event is used to further clarify the program.

Finally, the ITOM Chair and the Program Director conduct one-on-one advising for anything related to MSITM – careers, specific course questions, internships, paths and opportunities, etc.

#### **Graduation Rates**

The following is the number Degrees awarded since the start of the program:

MS Degrees Awarded (ITMT Majors)						
MS	MS-ITMT					
AY 14-15	10					
AY 15-16	10					
AY 16-17	10					
AY 17-18	26					
AY 18-19	16					
AY 19-20	30					
TOTAL	102					

#### Student Recruitment and Retention

ITOM has built an extensive and multifaceted strategy to recruit and keep students in the program. ITOM's MSITM is a STEM Discipline, http://iea.fau.edu/inst/inventory712.pdf . Above all, we have developed a very information rich web site for both undergraduate and graduate programs. The Chair and the ITOM Program Director are committed to meet one and one any potential candidate who has questions or wants to learn more about the program.

Below are specific efforts ITOM undertakes to recruit more students to the MSITM program.

- Engage Local Industry. ITOM has a very active Advisory Board whose members are local
  industry leaders in Information Technology (IT). Several of them have taken proactive
  initiatives to leverage their connections with local high schools and talk to and mentor
  high school students toward MIS degree at ITOM, FAU
- Invited Speakers. Each class taught by ITOM once a semester has an invited speaker who is an industry leader to talk about IT and its importance in organizations and job opportunities.
- **ITOM Advisory Board.** Each member of the AB is an individual mentor of a group of 3-4 MIS students and guides them through their course choices, resume building, presenting themselves, and choosing a career focus. This is accomplished through Skype sessions, coffee chats and other formats best fit to students.
- MISA the MIS student association. ITOM has an energetic and dedicated Faculty
  Advisor for the Management Information System Association (MISA). In addition to
  mentoring student officers and students, he has developed significant relationships with
  local companies. With their weekly events, Information Sessions, and company tours
  that have become increasingly popular, the Faculty Advisor helps bridge MISA and our

students with local companies and helps promote our students to the industry leaders. As a result of the efforts and the enthusiasm of the student, the MISA group is recognized as the most vibrant and active student groups by the FAU Career Services. Many of his guest speakers and the leaders he connects with proceed to hire our students full time or as interns.

- Efforts through Palm Beach Workforce Alliance and Palm Beach Tech. The ITOM Chair and the ITOM Program Director are members of the Palm Beach Workforce Alliance's IWDI (Infotech Workforce Development Initiative) and Palm Beach Tech, whose goal are to guide the educational institutions to establish common talent/skill development and recruitment goals and strategies for training in IT-related disciplines. The Committee developed Talent pipeline with IT programs offered in IT in Palm Beach County. This document is disseminated directly to Guidance Counselors.
- Company Tours for MIS students. Advisory Board members organize company tours for students. Some recent very successful tour were at Citrix for the students in the Data Communications class, organized by the CIO of Citrix, as well as with the MIS Student Association members, again at Citrix and at NCCI, as well as with Modernizing Medicine, Office Depot, City Furniture, etc.
- COB Advisors. ITOM is closely working with COB Graduate advisors and educating them
  about the degree specifics. We appointed ITOM liaison who works directly with advisors
  and answers their questions. The ITOM Chair conducts at least 2 meetings each
  semester with all advisors to inform them of the curriculum specifics and answer their
  questions about the program
- Internships and Job Opportunities Promotion. Each semester the ITOM Chair uses a survey to build a mailing list of MIS students who are interested in Internships and Job Opportunities. Advisory Board members commit to opening Internship opportunities for ITOM students. All job opportunities that reach ITOM reach the students by direct emailing to them
- Open House and Information Sessions. The Program Director gives every semester
  Open House for potential candidates and Information Session on the Accelerated
  program.
- Alumni reach-out. ITOM created a Linked-in ITOM Alumni group. Alumni will be
  featured on our web site and will be invited to the classrooms to connect to students
  and help. Connection with Alumni and understanding their nature of work will help
  promote our MSITM program.

#### **Faculty**

#### **Administrative Structure**

ITOM has a Chair who is a tenured faculty member and the only 12 month appointment. Since 2013 ITOM has appointed a Program Director (instructor with reduced teaching load) to support the growth, advising, and recruitment of our programs. ITOM has several active committees, among which Strategic Planning, Personnel, Curriculum, Assessment, Marketing, and some ad-hoc committees. Full time instructors and tenured faculty are members of these committees.

#### **Faculty Profile**

The Department of Information Technology and Operations Management employs 21 full-time faculty across two disciplines: MIS and Operations Management. This includes 5 full professors, 5 associate professors, 4 assistant professors, 3 senior instructor, and 4 instructors. One emeritus professor also remains active in publishing and service.

Abbreviated faculty CVs are provided in Appendix 2 of this report.

All faculty are AACSB qualified. The tenured/tenure-track faculty all have actively maintained their Scholarly Academic qualifications, and of the 7 senior instructors/ instructors, 2 are qualified as Scholarly Academics, the rest are Professional Academic.

ITOM has an established group of approximately a dozen experienced and qualified adjunct faculty, who provide additional classroom support as needed in both undergraduate and graduate classes.

The current faculty rank mix meets the Department needs. In 2020 we successfully hired three tenure-track faculty members and 1 instructor. In 2020 one tenure-track faculty earned tenure and was promoted to Associate professor. With that, we completed the goal to align faculty resources with College/University research goals and the Department's growth plans. We do not have hiring plans for the next two years, except for replacing faculty who leave. Demographically, ITOM is facing challenges in recruiting female tenure-track faculty which will be our focus in the next Review Cycle.

The following table presents the rank, academic, and demographic profile if the ITOM faculty.

Name	Rank	Ph.D	Gende r	Ethnicity	Academic Discipline
Sunil Babbar	Full Professor	Υ	М	Asian	OM
Ravi Behara	Full Professor	Υ	М	Asian	OM
Tamara Dinev	Full Professor	Υ	F	Caucasian	MIS
Jim Han	Full Professor	Υ	М	Asian	OM
Paul Hart	Full Professor	Υ	М	Caucasian	MIS
	Associate	Υ	N.4	Hispanis	MIS
Stuart Galup	Professor	Y	M	Hispanic	IVIIS
	Associate	Υ	М	Asian	MIS
Jahyun Goo	Professor	I	IVI	Asiaii	IVIIS
	Associate	Υ	М	Asian	MIS
Derrick Huang	Professor	'	171	Asiaii	IVIIS
	Associate	Υ	М	Caucasian	ОМ
David Menachof	Professor	'	171	Caucasian	Olvi
	Associate	Υ	М	Asian	MIS
Chul Yoo	Professor		141	Asian	
Milad Baghersad	Assistant Professor	Υ	М	Asian	OM
Mohsen		Υ	М	Asian	ОМ
Emadikhiav	Assistant Professor				
Inkyoung Hur	Assistant Professor	Υ	F	Asian	MIS
Magno Queiroz	Assistant Professor	Υ	М	Hispanic	MIS
		Υ	F	African	MIS
Pauline Chin	Senior Instructor			American	
Karen Dye	Senior Instructor	Υ	F	Caucasian	OM
Mary Schindlbeck	Senior Instructor	Υ	F	Caucasian	MIS
Lawrence		N	М	Caucasian	MIS
Feidelman	Instructor		141		
Mircea Marandici	Instructor	N	М	Caucasian	MIS
Bharti Sharma	Instructor	Υ	F	Asian	MIS
Jonathan Sweet	Instructor	Υ	М	Caucasian	MIS
Neal Alewine	Adjunct Instructor	Υ	М	Caucasian	MIS
Mehran		Υ	М	Asian	MIS
Basiratmand	Adjunct Instructor	•	171	7.51011	
Dennis Battistella	Adjunct Instructor	N	М	Caucasian	OM
William Gallart	Adjunct Instructor	N	М	Caucasian	MIS
Evan Jaffe	Adjunct Instructor	N	М	Caucasian	OM
Zsuzsa Pusztai	Adjunct Instructor	N	F	Caucasian	MIS
Matt Ramsey	Adjunct Instructor	N	М	Caucasian	MIS
Rhian Resnick	Adjunct Instructor	N	М	Caucasian	MIS
Danny Sementilli	Adjunct Instructor	N	М	Caucasian	MIS
Omar Toledo	Adjunct Instructor	N	М	Hispanic	MIS

#### Section D. Research

**ITOM Research Goals.** The ITOM Mission statement reflects our research goals: to continually innovate and increase the quality of its educational and research activities in a manner that increases education effectiveness and global reach. Per the Vision statement, ITOM Department balances world renown research with excellence in teaching to create successful students.

ITOM goals are aligned with the COB goals for scholarship: Our pursuit of Scholarship is fundamental to the creation of an intellectually relevant climate at the College of Business. It is based on a foundation of intellectual honesty and belief in lifelong learning. The research questions we address are relevant to the business community, both locally and globally, while being academically rigorous. Our scholarship is the cornerstone of our excellence in teaching and service to our community.

It is the goal of ITOM to produce highest quality of publications in peer reviewed journals recognized at the aspirant schools; to encourage interdisciplinary collaboration and expanding the research horizons; to foster a climate conducive to seek research funding through collaborative efforts across departments and colleges.

Despite that in recent years ITOM has lost several faculty, some of whom were highly research productive, we kept the productivity. In 2020 we hired three tenure-track faculty and with this we aim to increase the research productivity. There are also caveats that must be noted in assessing the research productivity for any given year. (1) There are swings in research productivity over short periods of time. (2) The metrics do not account for quality of peer-reviewed articles or conference presentations. (3) If faculty collaborate with colleagues in their Department, then the Department productivity is higher, whereas if faculty collaborate with colleagues in other universities instead the Department is indirectly penalized.

#### Faculty teaching load and methods of calculation

Contractual teaching loads are 4 courses for each of the Fall and Spring semester. Active research and publications in peer reviewed journals result in one or more course releases, depending on the quality of the publication outlet. The following framework serves as a guideline for the faculty of ITOM;

The table below provides the Framework of Evaluation of Research component of the Annual Evaluation. Research Productivity is always assessed in 3-year window. High Service load can lead to another course release.

Good	Maintain your AQ, including by publishing in non-ranked journals (per the current AQ) or ABS 1 and 2.
	Higher Teaching load
Outstanding	Publish in the ABS Category 3 or 4 journals
	OR earn Research grant
	2-2 Teaching load (with adequate service load)
	Travel support
Exceptional	Publish in at least one 4* journal or two ABS 4
	OR Substantial Research grant (\$100,000 or more)
	2-2 Teaching load (with adequate service load)
	Travel support

**Research and Scholarly Productivity.** Since 2013 ITOM faculty published total of 78 papers in premier and other highly ranked MIS and Operations Management journals (the count includes papers published during 2020). ITOM faculty have been co-PI's of joint grants with College of Engineering and Medicine worth millions of dollars.

The table below shows the Departmental Dashboard Indicators for ITOM's Research/ Scholarly Productivity:

		Information Technology & Operations Management				
	2014- 2015	2015- 2016	2016- 2017		2018 - 2019	
1. Books (including monographs & compositions)	0	2		0	0	
2. Other peer-reviewed publications	15	8	17	15	8	
3. All other publications	0	1	6	2	0	
4. Presentations at professional meetings or conferences	15	11	19	14	9	

The table below shows the Efficiency Data - Scholarly output per tenured and tenure earning faculty member:

	Information Technology & Operations Management				
	2014 2015 2016 2017 2018				
	-	-	-	-	-
	2015	2016	2017	2018	2019
1. Books (including monographs & compositions)	0	0.2	0	0	0
2. Other peer-review publications	1.5	0.8	1.7	1.4	0.7
3. All other publications	0	0.1	0.6	0.2	0
4. Presentations at professional meetings or conferences	1.5	1.1	1.9	1.3	0.8

The table below shows Faculty Person Years and FTE Devoted to Research:

			Information Technology & Operations Management				1	
				2014- 2015	2015- 2016	2016- 2017	2017- 2018	2018- 2019
	Tenured & tenure-	Professor, Assoc	Person- Years		0.3	2.5	2.6	2.6
	earning faculty	Professor, Asst Professor	FTE		0.4	3.3	3.5	3.4
	Non- tenure-	Instructors, Lecturers,	Person- Years	1.9	2.1	0.1	0.1	0.1
	earning faculty	Visiting Faculty	FTE	2.6	2.8	0.1	0.1	0.1
Department al Research	Other personnel		Person- Years	0.1	0.1			
ai kesearcii	paid on faculty pay plan		FTE	0.2	0.1			
	Other		Person- Years			0.3	0.1	0.1
			FTE Person-			0.4	0.2	0.1
	Т	Total		2.1	2.5	2.9	2.8	2.7
_			FTE	2.8	3.3	3.9	3.8	3.6
	Tenured & tenure-earning	Professor, Assoc Professor,	Person- Years			0.1	0.1	0.1
	faculty	Asst Professor	FTE			0.1	0.2	0.1
	Non- tenure- earning	Instructors, Lecturers, Visiting	Person- Years	0				
	faculty	Faculty	FTE	0				
Sponsored Research	Other personnel		Person- Years					
Research	paid on faculty pay plan		FTE					
	Other	Person- Years						
			FTE					
	Т	otal	Person- Years	0		0.1	0.1	0.1
			FTE	0		0.1	0.2	0.1

'Other personnel paid on faculty pay plan' includes Scholar/Scientist/Engineer (all ranks) The data Includes summer, fall and spring semester data. Person-year is equal to 1 person working full time for one year: 1.00 FTE = .75 person-years

The ITOM Department devoted 2.7 Faculty Person-Years and 3.6 FTE to research activity in 2019, up from 2014-2015 indicators (2.1/2.8 for Person-Years and FTEs respectively). In 2019 the Department generated 1.5 peer-reviewed articles and 1.9 conference papers per faculty.

The Department's research productivity is consistent with the previous years and with the intellectual capital it has. With the recent successful hires, we expect that these numbers will grow in the next 5 to 7 years.

The FAU College of Business references the Chartered Association of Business Schools' (ABS) 2018 Academic Journal Guide (AJG) for the purpose of rating journal quality in promotion and tenure and award decisions. ITOM faculty regularly publish in ABS3 or higher ranked journals, which is a goal of the FAU College of Business. Our faculty also has a long history of publishing in journals on the Financial Times 50 list, such as MIS Quarterly. Information Systems Research, Journal of Operations Management, Production and Operations Management. The College of Business provides three years of summer support (at 12.5% of the nine-month salary) to new assistant professors during the first three years. The Dean's Summer Research grants offer support for for research-active faculty who have published in ABS 3 or better journals. The College awards a number of research fellowships annually that include stipends for top-producing faculty, along with teaching and service fellowships. Several ITOM professors have been awarded several times these prestigious professorships and fellowships for the last 5 years.

The College of Business supports travel for conference participation, covering two conferences per year including all registration costs and a stipend for additional travel expenses depending on the ranking of the conference (as established by the individual departments) and whether it is domestic or international. Although travel restrictions during the COVID-19 pandemic have eliminated the need and costs of travel to conferences, the dean's office has continued to support registrations for virtual conferences as requested.

Faculty computers are regularly updated, and support is consistently available for software or databases needed for research. In addition, the dean's office provides small grants (typically under \$2,000, but they have approved requests up to \$10,000) for funding data collection costs.

ITOM faculty's research interests are aligned with the College's strategic thrusts: Business Analytics, Healthcare Analytics, Cybersecurity, Artificial Intelligence, Supply Chain Management and Transportation and Port Logistics. ITOM OM and MIS faculty have found rewarding collaboration opportunities and have produced highest quality of research and grants.

ITOM faculty are actively involved in collaborative sponsored research on healthcare information systems and healthcare analytics with College of Engineering, College of Nursing, and the Health Administration program at the College of Business.

#### Interdisciplinary efforts and community engagement efforts.

**Cyber Security Center (Center for Cryptology).** ITOM actively participates in the initiative of creation of University-wide umbrella center of Information Security, and ITOM is one of the key founding members. We proceeded with acquiring teaching and research certification with NSA which will largely enhance the visibility of the center and its contribution to the University Research and teaching goals.

**Business Analytics.** ITOM is a central part of the FAU's "University of Distinction" plan for applied artificial intelligence and big data analytics which was officially approved by the Florida Board of Governors. Big Data Analytics is one of the platforms highlighted in the FAU President's 2015 strategic plan. Our teaching and research employ Big Data and statistical techniques, data mining, link analysis, machine learning, econometrics, optimization, and experimental methodologies in order to extract actionable insights from Big Data. Of particular interest to this interdisciplinary effort and community engagement efforts are meaningful industry partnerships that will help our mission through knowledge and data sharing. We have faculty actively involved in collaborative research on healthcare information systems and healthcare analytics with College of Engineering and Health Informatics with the Health Administration program.

## **Section E. Service and Community Engagement**

It is the Department goal to service the institution, profession, students, and community. We strive to have each full-time faculty member involved in at least one of the following service activities:

- Involvement in faculty support, Department, College, and University committees
- Conducting professional service such as peer reviewing of journal and conference papers, participating in conference organization committees, National/International accreditation committees, professional organizations and others.
- Engagement in community-based service such as reaching out and working with companies, memberships in advisory board committees, working and reaching out to guest speakers
- Working with student groups such as MISA and professional mentoring of students

The tables below provide the Departmental Dashboard Indicators. Beginning with the 2018-2019 year the Departmental Dashboard Indicators Include Calendar Year Activity.

The total service productivity for the review period, the number memberships and faculty serving as editors or referees is shown in the table below.

B 1-3 Service Productivity	Information Technology & Operatio Management			ations	
	2014- 2015	2015- 2016	2016- 2017	2017- 2018	2018- 2019
1. Faculty memberships on department, college or university committees	60	53	47	46	40
2. Faculty memberships on community or professional committees	17	18	22	17	14
3. Faculty serving as editors or referees for professional publications	33	48	76	13	42

Efficiency data - Faculty committee memberships and faculty serving as editors or referees per tenured and tenure earning faculty member are given in the table below:

C 1-3 Efficiency Data	Information Technology & Operation Management			ations	
	2014- 2015	College Total	2016- 2017	2017- 2018	2018- 2019
1. Faculty memberships on department, college or university committees per faculty member	6	5.3	4.7	4.2	3.6
2. Faculty memberships on community or professional committees per faculty member	1.7	1.8	2.2	1.5	1.3
3. Faculty serving as editors or referees for professional publications per faculty member	3.3	4.8	7.6	1.2	3.8

The service productivity has been very strong relative to other departments in the College. We offer extensive membership to committees and University governance. We have dedicated faculty that serve the community through Board memberships and City governance committees, in National University accreditation bodies and curriculum standardization bodies. We have faculty members serving as Associate editors in premier and top journals, with awards for Best Reviewer of the Year. Faculty serve at the Academy of Management Leadership and Organization Committees. Faculty have put immense effort into creating and mentoring the MISA student association. Currently MISA is thriving, energized and helps promoting the MIS major. Faculty participate in Faculty Learning workshops such as Teaching with Technology, E-Learning, etc.

While the Department service goals are generally being met, there are two main areas where there are gaps that could be improved. The Department pursues a dual mission of teaching large number of service courses and newly developed majors/concentrations, while also requiring a strong research output for tenured/track faculty without graduate support and a Ph.D. program. In addition, service loads have been very high in recent years in our outreach effort to promote our MIS programs. As a result, faculty has been stretched to the limit. This in turn limits the extent to which service goals can be met for further developed. With the recent hires, we expect improvement in this area.

As the Department has tenured/tenure-track, instructor and adjunct faculty, College bylaws limit the types of committee assignments to different faculty under existing rules. More effective utilization of all faculty and their skills should be pursued, for a more inclusive and equitable distribution of committee service work and responsibilities.

### **Section F. Other Program Goals**

A main goal is to keep the Department's program curriculum current and relevant. The Department has actively pursued its program development. It reached to the industries and communities of interest to make sure that their needs for talent development are met. A new graduate program, MS in Supply Chain Management, has been successfully launched in 2020. In addition, the now mature and thriving MSITM and the accelerated BBA-MSITM program have grown. Further, new MIS minors in emerging areas have been developed. These include the Healthcare IT and Digital Marketing minors.

The other main goal of the Department was to launch outreach efforts and bridge the industry with our students. The Department has an active Advisory Board that now meets regularly and gives the Department a much-needed perspective from current and potential employers of our students. In addition, the Department is also affiliated with the South Florida Procurement Professionals executive group, who bring their operational expertise to the Department's Operations management program; with Palm Beach Tech and Workforce development committee, and many others. The Department has also successfully nurtured its student association MISA to bring together MIS students, alumni, faculty, and industry leaders. Student outreach has also been pursued through open houses, meeting advisors, and informal promotion of the program in our classes.

## Section G. Strengths and Opportunities

**University and College Strengths.** Below is a list of some major strengths of our College and institution as a whole, providing an excellent environment for nurturing program growth and intellectual contributions:

- Highly desirable location great place to work and live, competitive advantage for hiring, retention
- Long-term stable College administration and staff with high levels of expertise in university systems and processes
- Supportive administration in the College/Dean's office
- Excellent COB professional advising staff
- Three-year summer support for newly hired tenure/tenure-track faculty
- Strong Executive Education program (offers revenue-generating degree and non-degree programs)
- Administrative transparency and engagement of faculty in shared governance

- Summer grants available for research-active faculty publishing in top outlets
- Reasonable/appropriate teaching load, number of course preps, and class sizes
- Travel support for conference participation
- IT and technology support for both Teaching and Research, including hardware, software, and access to data, training
- Excellent pedagogical support from University and College offering training, certifications, access to fellow faculty expertise in the College

#### **ITOM Department Strengths**

- Growing enrollments in MIS undergraduate and MSITM graduate degree programs
- 100% placement rate for the MSITM graduates for now 7<sup>th</sup> year
- High placement and salary rates for the MIS majors
- Active MIS/OM internship program
- Active and vibrant MISA Association student chapter ranked as one of the most engaged and vibrant students' associations in the University
- Popular minors in Business Analytics, Cybersecurity, Digital Marketing (jointly offered with the Marketing Department), and Healthcare Information Systems (jointly offered with Health Administration program)
- Strong engagement with companies in classroom settings by invited speakers, company tours, experiential, and service learning
- Highly qualified and experienced adjunct instructors available to cover needs
- Highly experienced faculty with various teaching modalities: online asynchronous, remote live synchronous, hybrid, and face-to-face modes, providing scheduling flexibility to meet student demand
- Engagement with undergraduate research initiatives critical to University's QEP
- Diverse student body
- Active Social Media (Facebook, Instagram, Linked-in) channels engaging students
- Excellent, well designed and well-developed promotional materials Department website; printed recruitment materials for the major; information pamphlets.
- Highly informative 2 min spotlight videos about the major courses, published on the ITOM web site.
- Highly collegial and supportive faculty environment in Department and College
- 100% AACSB Scholarly Academic qualified research faculty; 100% AACSB qualified instructors
- Collaborative research engagement with other Departments in the College, College of Engineering, and College of Nursing
- Successful hiring of new faculty in last four years, adding new energy and intellectual capital in the strategic areas of Business Analytics, Supply Chain Management, and Artificial Intelligence

#### **Opportunities for ITOM**

There is an increased interest and demand in Business Analytics and Artificial Intelligence classes and programs. We believe that there is an opportunity and favorable timing to capture this interest and create a Master of Science in Business Analytics (MSBA). We are working through the process and currently have the Dean's and the Provost's support. Currently, we are waiting for the results of the survey from an external consulting company that will evaluate the demand and the market for such degree.

We have successfully leveraged the strength of our Department – the intellectual capital in IT and Operations Management - and bridged the two fields in teaching and research. What helped is that our new hired faculty are proficient and credentialed in both fields and draw on the strengths and the opportunities this offers. For example, an Operations management faculty is teaching Business Analytics with Python and R; A Supply Chain Management faculty created a course in Supply Chain Analytics, etc. The Data Analytics continues to be successfully leveraged as the common platform around which the teaching and research initiatives of the Department can integrate more effectively.

The third opportunity is reopening our Ph.D. program and revamping its curriculum to include specialization in Business Analytics/ Artificial Intelligence and Supply Chain Management. Along with the MSBA, this is the next focused effort for 2021. The Dean's office support for tuition waivers and TA is crucial to the success of this opportunity.

#### Section H. Weaknesses and Threats

- A lot of the threats and weaknesses during the last review cycle have now been eliminated and resolved. The faculty's teaching loads are better aligned with the expectations for high quality research. we expect that this situation will yield better results.
- We need to restart our Ph.D. program which has been in a pause (not accepting students) for now 10 years. We were planning to re-open it in Fall 2020. Due to the COVID-19 situation and budget cuts, it was decided to postpone re-opening the program. We hope, as the conditions stabilize, to restart and rebuild a strong Ph.D. program in MIS and Operations Management
- The largest student body at the College of Business at FAU is the commuting/working students. The drawback of this is the lack of strong cohesive student body to inspire collaboration and interaction among students.
- Growing competition to our programs coming from the State Colleges and the increasing presence of other online programs across the country, state and local area.
- There are impediments for instructors and adjuncts to participate in research and service activities which will lighten up the service committee load of tenured faculty.

### **Section I. Resource Analysis**

The Department provides a significant number of service courses to the College. In addition, it also has an undergraduate MIS program, a graduate MSITM program, a graduate MSSCM program, contributes to the MBA core, the MBA concentration in Business Analytics and Operations Management, and a variety of new and existing minors in MIS and Operations Management.

Junior and senior faculty who have strong interest in publishing in premier and highest quality journals have been hired and promoted, and that will give the opportunity to enhance the research productivity of the Department and support the goal of high research expectations. The increased high-quality research productivity will give opportunity to revive a strong PhD program as adequate to a research granting institution.

The College Leadership worked tirelessly to support and secure faculty lines. In 2020 we completed the hiring and we believe the new resources that have joined the Department will contribute to bring the Department to the next level and meet our program goals of high-quality teaching, research and service.

#### **Section J. Future Direction**

Anticipated changes. The main uncertainty we face at this time is the economic and budget consequences of COVID-19. This is a national and state uncertainty as well, so until there is more clarity, we are not able to do much at Department level. Currently, in alignment with the ITOM Strategic plan, we anticipate and prepare for growth of our MS in Supply Chain Management, and creation of the MS in Business Analytics program. The following initiatives represent the main set of tasks the Department wants to see being involved in.

- <u>INITIATIVE 1</u>: Explore the development of a Business Analytics specialization of the PhD in Business Administration program with appropriate faculty resource support.
- <u>INITIATIVE 2</u>: Explore integration of ITOM with other programs, such a Healthcare Analytics that will make business analytics a nexus.
- <u>INITIATIVE 4:</u> Explore Redesigning the role and contribution of Instructors and Adjunct Faculty to enable their participation in research and committee service
- <u>INITIATIVE 5:</u> Explore collaborative teaching. For example, a full-time faculty to give a lecture in another ITOM class

### **Questions for the Review Team**

- 1. How to best restart the PhD program at ITOM? We are interested in learning about bootstrapping from zero, both process and tactical decisions we can make to help the bootstrap.
- 2. How can we improve our faculty diversity? What are the best practices in addressing diversity in faculty and staff? What are some initiatives at your own institutions that have proven to be successful in improving faculty diversity?
- 3. What is the impact of the COVID-19 experience on determining the "right" mix of online, hybrid, face-to-face (or other?) classes for the next generation of college students? What would be the future of the demand for online programs and should our efforts focus on that delivery mode? Are there creative opportunities for changes to delivery modes that we should be considering?
- 4. Do you believe a Master of Science in Business Analytics program housed at the College of Business should have core mandatory classes from other colleges, such as Science, Engineering, or Social Sciences? Or do you believe such classes should rather be electives? For example:
- Terry College of Business, University of Georgia, the MSBA curriculum is designed multidisciplinary within the College, with electives from other colleges, <a href="https://www.terry.uga.edu/msba/curriculum.php">https://www.terry.uga.edu/msba/curriculum.php</a>
- Similarly, at Pamplin College of Business, Virginia Tech, the curriculum is designed multidisciplinary within the College, with currently no electives from other colleges, <a href="https://cbia.pamplin.vt.edu/masters/curriculum.html">https://cbia.pamplin.vt.edu/masters/curriculum.html</a>

## **Appendix 1a: MIS Undergraduate Degree Program Sheet**

## FAU | COLLEGE OF BUSINESS | STUDENT ACADEMIC SERVICES

## Management Information Systems (MIS, MISI, or MISB)

The following information is a general overview of the program. Academic advising is recommended before registration each term.

#### General Degree Requirements

A minimum of 120 credit hours are required for the degree. See university catalog for official list of degree requirements. This program is available as a BBA degree or, with six additional credits of advanced math, a BS degree.

#### Maximum Course Attempts

FAU counts a "course attempt" as any time a student is enrolled in a course (at any institution) and earns either a grade or a "W". FAU COB students may not attempt any course more than twice; third attempts are not permitted. Transfer students who have not successfully completed a pre-business course within three attempts are not eligible to declare a business major at FAU. The College of Business will not permit fourth attempts for transfer students. Transfer students who have already attempted a pre-business course twice at a previous institution should speak with an advisor for more information.

#### Intellectual Foundation Program (IFP) Courses

The pre-business foundation courses satisfy much of the IFP, but the following additional coursework is required. Students with an AA (Associate of Arts) degree from a regionally accredited Florida Public Institution are deemed to have met the IFP. To view the entire IFP course list, use this case sensitive URL: http://www.fau.edu/uestudies/IFP curriculum sheets.php.

Category	Required Credits	Notes					
Natural Science	6 credits	One course must include a lab					
Global Citizenship	6 credits	Choose one Writing Across the Curriculum (WAC) course					
Humanities	6 credits	from either Global Citizenship or Humanities					

#### Pre-Business Foundation Courses (2.5 GPA Required in the Courses Below; Minimum Grade "C")

Course Title	Prefix and Number	Pre-requisites (Minimum Grade of "C")
College Writing I	ENC1101	
College Writing II	ENC1102	ENC1101
Accounting I (Financial)	ACG2021	30 credits
Accounting II (Managerial)	ACG2071	ACG2021
Macroeconomics	ECO2013	30 credits
Microeconomics	ECO2023	30 credits
Methods of Calculus	MAC2233	MAC1105 or ALEKS score 45
Introductory Statistics	STA2023	MAC1105, MGF1106, MAC2233, or ALEKS score 30
Information Systems Fundamentals	ISM2000	

#### Requirements to Declare the Major and Timely Graduation

To declare Management Information Systems (MIS), students must have earned 60 credit hours, satisfied the foreign language admission requirement (FLENT), and achieved a minimum 2.5 GPA in the Pre-Bus Foundation. For timely graduation, students should plan courses in consultation with an academic advisor, create a balance between taking business core and major courses each semester, and prioritize major courses as they are not offered every term.

#### Business Core Courses (Minimum Grade "C")

Course or Requirement Title	Prefix and Number	Pre-requisites (Minimum Grade "C")
Management and Organizational Behavior	MAN3025	60 cr (45 cr w/advisor approval and pbus/IFP complete)
Marketing Management	MAR3023	60 cr (54 cr w/advisor approval); ECO2013 & ECO2023
Financial Management	FIN3403	60 cr (54 cr w/advisor approval); ACG2021 & ACG2071
Business Law 1	BUL4421	60 credits
Choose ONE international economics course:	Choose ONE:	
International Economics	ECO3703	ECO2013 & ECO2023
International Economic Development	ECS3013	ECO2013 & ECO2023
Economics of International Trade	ECO4704	Declared in major; ECO2013 & ECO2023
International Monetary Economics	ECO4713	Declared in major; ECO2013 & ECO2023
Management Information Systems	ISM3011	Declared in major; 60 credits; ISM2000
Intro. to Business Communication	GEB3213	Declared in major; 60 credits
Quantitative Methods in Administration	QMB3600	Declared in major; 60 credits; MAC2233 and STA2023
Operations Management	MAN3506	Declared in major; 60 credits; MAN3025 and QMB3600
Global Strategy and Policy	MAN4720	Declared in major; 90 credits; MAN3025, MAR3023, FIN3403 OMB3600, and MAN3506

#### Upper Division Business Elective (UDBE): Minimum One Course Required

	MIS Students	MISB/MISC Students
	All bus. core majors must complete 51 cr. (17 courses) of upper division business coursework. MIS requires 16 courses	No UDBE required
ı	in the core and the major; the 17th course is an elective chosen by the student. Choose ONE 3000 or 4000 level	
ı	business course not already taken in the core or major. Speak to a career advisor about using an internship here.	

Updated 7/2/20

#### Management Information Systems Major Courses (Minimum Grade "C")

Choose a Path: Information Technology (IT) or Information Knowledge (IK). Both paths require same number of courses.

Information Technology (IT): This is the classic MIS path that provides core technical skills needed to manage and design Information Technology in organizations. This path is required for the BBA/BS to MS accelerated program.

Optional Concentrations: Students can take either all four courses marked as MISC for a concentration in Cybersecurity or MISB for a concentration in

Business Analytics. A concentration is required for the accelerated BBA/BS to MIS program.

Course or Requirement Title	Prefix and Number	Pre-requisites (Minimum Grade "C")
Intro to Comp. Sys. & Software Development	ISM3230	Declared in major; ISM2000
Business Data Communications	ISM4220 (MISC)	Declared in major; ISM2000
Database Management Systems	ISM4212 (MISB)	Declared in major; ISM3011 or ACG4401
Choose TWO ITOM Dept. Electives:	Choose TWO:	
Introduction to Cybersecurity	ISM4320 (MISC)	Declared in major
Mgmt. of Info. Assurance & Security	ISM4323 (MISC)	Declared in major
Computer Forensics	ISM4324 (MISC)	Declared in major; 60 credits
Introduction to Business Intelligence	ISM3116 (MISB)	Declared in major; ISM3011
Advanced Business Intelligence	ISM4403 (MISB)	Declared in major; 60 credits; ISM3116
Data Mining and Data Warehousing	ISM4117 (MISB)	Declared in major; 60 credits
Project Management	MAN4583	60 credits
Mobile Apps for Business	ISM4053	60 credits
Social Media and Web Technologies	ISM4054	Declared in major; ISM2000
Social Media and Web Analytics	ISM4420	Declared in major
Special Topics (subject matter varies)	ISM4930	Declared in major; 90 credits; may require instructor permission
Internship	ISM4940	See career advisor for more information
Advanced Systems Analysis and Design	ISM4133	Declared in major; 60 credits; 9 credits completed in MIS

Information Knowledge (IK): This path provides students with general, broad knowledge in information and knowledge management in organizations, digital products and service development, social media analysis as well as project management

Optional Concentrations: Students can take either all four courses marked as MISC for a concentration in Cybersecurity or MISB for a concentration in

Business Analytics

ousiness Analytics.		
Course or Requirement Title	Prefix and Number	Pre-requisites (Minimum Grade "C")
Choose FIVE ITOM Dept. Electives:	Choose FIVE:	
Introduction to Cybersecurity	ISM4320 (MISC)	Declared in major
Mgmt. of Info. Assurance & Security	ISM4323 (MISC)	Declared in major
Computer Forensics	ISM4324 (MISC)	Declared in major; 60 credits
Business Data Communications	ISM4220 (MISC)	Declared in major; ISM2000
Introduction to Business Intelligence	ISM3116 (MISB)	Declared in major; ISM3011
Advanced Business Intelligence	ISM4403 (MISB)	Declared in major; 60 credits; ISM3116
Data Mining and Data Warehousing	ISM4117 (MISB)	Declared in major; 60 credits
Database Management Systems	ISM4212 (MISB)	Declared in major; ISM3011 or ACG4401
Project Management	MAN4583	60 credits
Global Supply Chain Management	MAN4597	60 credits
Mobile Apps for Business	ISM4053	60 credits
Social Media and Web Technologies	ISM4054	Declared in major; ISM2000
Social Media and Web Analytics	ISM4420	Declared in major
Intro to Comp. Sys. & Software Development	ISM3230	Declared in major; ISM2000
Contemporary Issues of Digital Data Mgmt	ISM4041	Declared in major
Social Media Innovation	ISM3007	Declared in major
Healthcare Information Systems	ISM4381	
Special Topics (subject matter varies)	ISM4930	Declared in major; 90 credits; may require instructor permission
Internship	ISM4940	See career advisor for more information
Advanced Systems Analysis and Design	ISM4133	Declared in major; 60 credits; 9 credits completed in MIS

#### About Management Information Systems

MIS focuses on using technology to solve business problems. MIS focuses on the concepts and tools necessary for analyzing, designing, planning, developing, and managing organizational information resources. Although entry level positions are similar to those earned by computer science graduates, MIS graduates are more likely to move into managerial positions overseeing and directing the design and development of systems solutions for companies.

#### Additional Information and Resources

#### College of Business Student Academic Services

Current students can make an appointment with an academic advisor or a career advisor via www.fau.edu/successnetwork. Prospective students can call in for assistance making an appointment.

Boca: 561-297-3688 | Davie: 954-236-1290 | <a href="mailto:www.business.fau.edu">www.business.fau.edu</a> | <a href="mailto:COBAdvising@fau.edu">COBAdvising@fau.edu</a> | <a href="mailto:business.fau.edu">business.fau.edu</a> | <a href="mailto:business.fau.edu">business.fau.edu<

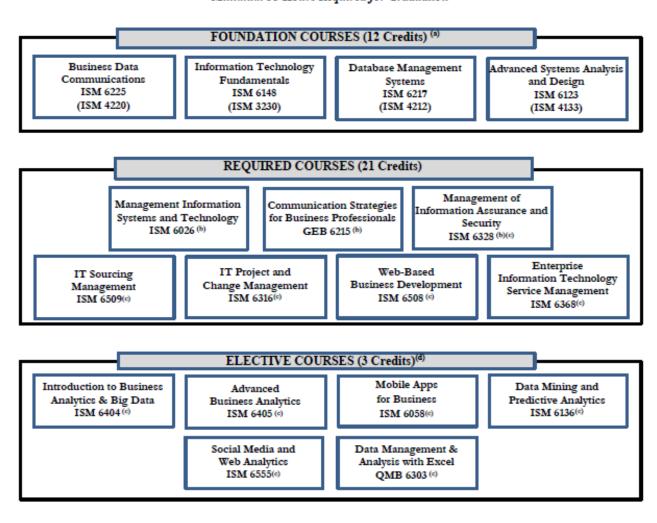
ITOM: Department: www.business.fau.edu/itom | Accelerated BBA/BS to MS: www.business.fau.edu/bba-ms

Updated 7/2/20

## **Appendix 1b: MSITM Graduate Degree Program Sheet**

College of Business Graduate Advising Office 777 Glades Road, FW 101 Boca Raton, FL, 33431 Information Technology & Operations Management Department Phone: 561-297-2545
E-mail: COBemdadvising@fan.edu
Phone: 561-297-3191
E-mail: askTOM@fan.edu

## MSITM —Information Technology Management Concentration Minimum 33 Hours Required for Graduation



#### COLLEGE OF ENGINEERING PROGRAM ELECTIVES (9 Credits) (e)

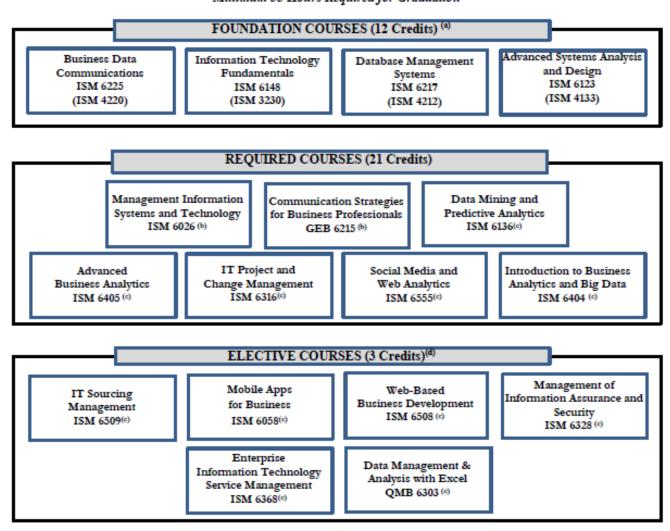
Please Visit the Link below to View the Recommended College of Engineering and Computer Science Elective Course List for MSITM Business Students

https://business.fau.edu/itom/cs-courses/

- Foundation courses cannot be taken for credit; however, prior course work or professional experience may be considered in lieu of these courses, with departmental approval. The courses in () are the undergraduate equivalents.
- b) GEB 6215 must be taken in the first semester, prior to or concurrent with ISM 6026, ISM 6368, ISM 6328, and ISM 6508.
- ISM 6942, Graduate Information Technology and Operations Management Internship, may be substituted for this course (offerings are dependent upon employer availability).
- d) Choose any 1 course from the Electives group.
- e) Select any 3 classes from the recommended list offered by the College of Engineering

College of Business Graduate Advising Office 777 Glades Road, FW 101 Boca Raton, FL, 33431 Information Technology & Operations Management Department Phone: 561-297-2545
E-mail: COBgardadvising@fau.edu
Phone: 561-297-3191
E-mail: askITOM@fau.edu

## MSITM —Business Analytics Concentration Minimum 33 Hours Required for Graduation



### COLLEGE OF ENGINEERING PROGRAM ELECTIVES (9 Credits) (9)

Please Visit the Link below to View the Recommended College of Engineering and Computer Science Elective Course List for MSITM Business Students

https://business.fau.edu/itom/cs-courses/

- a) Foundation courses cannot be taken for credit; however, prior course work or professional experience may be considered in lieu of these courses, with departmental approval. The courses in () are the undergraduate equivalents.
- b) GEB 6215 must be taken in the first semester, prior to or concurrent with ISM 6026, ISM 6368, ISM 6328, and ISM 6508.
- ISM 6942, Graduate Information Technology and Operations Management Internship, may be substituted for this course (offerings are dependent upon employer availability).
- d) Choose any 1 course from the Electives group.
- e) Select any 3 classes from the recommended list offered by the College of Engineering

## **Appendix 1c: Academic Learning Compacts for the MIS Majors**



All B. B. A. and B. S. majors are required to complete the interdisciplinary College of Business Core with grades of C or higher in each of the following courses:

BUL 4421 (Business Law I) MAN 3506 (Operations Management)
ENC 3213 (Writing for Management) MAN 4720 (Global Strategy & Policy)
FIN 3403 (Principles of Financial Management) QMB 3600 (Quantitative Methods in
Administration) ISM 3011 (Management Information Systems) MAR 3023 (Marketing Management

CONTENT KNOWLEDGE (Declarative Knowledge): Students will demonstrate knowledge of fundamental concepts in several areas of business, including:

Finance: capital budgeting, cash flows, cost of capital, valuation,

- Management: managing structure and design, managing organizational culture and change, managing teams, human resource management, managing employee diversity, motivation, and leadership, and
- Marketing: segmenting and targeting customers; elements of a marketing mix.
- Operations: product and process design, supply chain management, service operations, and quality management
- Information Systems: information technology use in organizations, types of large scale systems, ethical issues

In FIN 3403, ISM 3011, MAN 4720, and MAR 3023, students will be assessed via examinations and/or course projects that cover the content of these disciplines.

CONTENT KNOWLEDGE (Technical skills): Students will demonstrate proficiency in the use of computer software programs (word processing, presentation, spreadsheet, and databases) and their

applications to business practices. Students will also demonstrate proficiency in the use of quantitative methods and decisionmaking tools and techniques for business.

In ISM 3011, students will take exams and complete assignments in which they will use spreadsheets and databases. In QMB 3600, student will use both probabilistic and deterministic decision making tools and techniques. In MAN 3506, students will apply mathematical and statistical techniques to address issues in inventory control, project management, statistical process control, and forecasting.

**COMMUNICATION (Written Communication, Team/Collaborative** 

Communication): Students will produce traditional business documents (e.g., memos, letters, reports) that are clear, well-written, and follow standard conventions in style, punctuation, grammar, spelling, sentence structure, paragraph formation, and appropriate word choice. Students will demonstrate collaborative writing skills

by serving as peer reviewers for each other's work.

In GEB 3213, students will produce drafts, revise, edit, and submit several types of documents related to business correspondence such as letters, memos, and reports. Students will serve as peer reviewers for each other's work.

CRITICAL THINKING (Analytical Skills): Students will apply business models to complex fact patterns. Students will demonstrate their ability to process financial information and to conduct a critical analysis that applies this information to financial decisions.

In MAN 4720, students will demonstrate analytic/critical thinking through their ability to apply relevant business models and/or strategic concepts and tools in a research project on a firm and/or industry. In FIN 3403, students will apply financial math and valuation principles to value securities, capital projects, and other assets. Students will interpret financial information and use it in decision making.

**CONTENT KNOWLEDGE (Declarative Knowledge) and** 

CRITICAL THINKING (Analytical Skills): Students will demonstrate an understanding of business law and business ethics, managerial responsibilities within the law, and the legal and economic implications of noncompliance.

In BUL 4421, students will complete an examination in which they must demonstrate their knowledge and understanding of business law. Students will also complete an examination in which they will demonstrate their knowledge and understanding of business ethics.

**CONTENT KNOWLEDGE (Declarative Knowledge, Research Skills, Technical Skills) and** 

COMMUNICATION SKILLS (Written Communication, Oral Communication, Graphic Skills, Team/Collaborative Skills), and

CRITICAL THINKING SKILLS (Analytical Skills, Practical Skills). Students, working in teams, will prepare and submit a documentation package for a proposed computer-based system for an organization.

In ISM 4133 (Advanced Systems and Design Analysis), students will work in teams of 4 or 5 to prepare and submit a written comprehensive systems analysis and design project documentation package for a proposed computer-based system for an organization. Successful completion of the project requires that students understand and integrate database and software development concepts. Each project member will deliver in-class oral presentations on the design project. Projects will be assessed using the rubric below. In addition, a representative from the organization will evaluate each documentation package by indicating the company's plans to implement all or any portion of the project, the quality and usefulness of the project to the organization, and the quality and usefulness of the documentation.

#### **Analytical and Practical Skills.**

#### Documentation will be rated as Superior, Adequate, or Inadequate based on these criteria:

The document identifies and clearly and fully defines the problem that the system is being designed to solve.

The content is relevant to the business problem reviewed.

The content demonstrates appropriate application of database, telecommunication, and software development concepts.

The content demonstrates in-depth analytical procedures to solve the problem.

#### Written Communication and Graphic Skills.

# Documentation will be rated as Superior, Adequate, or Inadequate based on these criteria The language of the document is concise and easy to read.

There is clarity and coherent organization of the project documentation.

The document reflects superior command of grammar and diction.

The document incorporates appropriate, useful, and accurate graphic representations.

#### **Oral Communication.**

#### Presentations will be rated as Superior, Adequate or Inadequate based on these criteria:

Comments demonstrate insights and knowledge about the contents of the project documentation package. The presenter effectively communicates the organizations' problem(s), solution(s), and methodologies used to obtain solution(s).

Creativity - The presenter uses innovative presentation methods.

Overall Project – The project generates substantial interest from other members of the class. **Team/Collaboration Skills.** 

# Presentations will be rated as Superior, Adequate, or Inadequate based on these criteria: The contributions to the project have been equitably shared among team

**criteria:** The contributions to the project have been equitably shared among team members.

An individual team member's contribution is positively assessed by other team members.

Revised 10/2018

COMPLETE DECEMENTS APPEAR IN FAU'S UNIVERSITY CA

# **Appendix 1d: Assessment Plan and Outcomes – Management Information Systems**

#### **Outcome 1 Details**

#### **Description and Methodology**

#### **Outcome Description**

ISM4133 - Advanced Systems Analysis and Design: Effective communication skills of students will be demonstrated in three categories:1. Writing a comprehensive systems analysis and design project documentation package for a proposed computer application. The documentation package is expected to address a "real world" computer-based system -- one which might realistically be developed and implemented. Students will work, in teams of 4 or 5, to develop the documentation package. Documentation packages are expected to exhibit clear and concise knowledge of the system problem and the proposed solution.2. In-class oral presentations, by each project member, as well as a presentation on a current IT topic. These oral presentations should be well organized and exhibit all the attributes of a good presentation, which include clarity, creativity and the ability to generate a high level of interest from the intended audience.3. External survey of the organization within which the student conducted the project. The organization liaison who worked with the student team would be the person designated to complete the survey. This survey consists of 21 questions divided into three categories: Questions 2 – 10 focus on company plans to implement the project, or any portion of the project, submitted by the students. Questions 11-15 focuses on the quality and usefulness of the project to the organization. Questions 16-21 focuses on the quality and usefulness of the documentation.

#### **Implementing Strategy:**

Projects from each section of ISM 4133 will be evaluated for the fall and spring semesters.

#### **Assessment Method:**

Project documentation and oral presentations will be assessed on the basis of a rubric developed and utilized across all sections of the course and which will be shared with the students. The rubric will be used to assess student performance in the three categories outlined below.

#### **SUPERIOR**

Written Communication

The document identifies and clearly and fully defines the problem that the system is being designed to solve.

The content presented is relevant to the business problem reviewed and demonstrates indepth analytical procedures to solve the problem.

The language of the documentation is concise and easy to read.

There is clarity and coherent organization of the project documentation.

The document reflects superior command of grammar and diction.

**Oral Communication** 

Comments demonstrate insights and knowledge about the contents of the project documentation package.

Clarity -- The presenter effectively communicates the organizations' problem(s), the solution(s),

and the methodologies used to obtain the solution(s).

Creativity - The presenter uses innovative presentation methods by the presenter.

Overall Project – Project generates substantial interest from other members of the class.

#### **COMPETENT**

Written Communication

The document adequately identifies and defines the problem that the system is being designed to solve.

The content is relevant to the business problem reviewed and demonstrates adequate analytical procedures to solve the problem.

The language of the documentation is concise and easy to read.

The document reflects adequate organization of the material and adequate command of grammar and diction.

Oral Communication

Comments demonstrate adequate insights and knowledge about the contents of the project documentation package.

Clarity- Presenter adequately communicates the organizations' problem(s), the solution(s), and the methodologies used to obtain the solution(s)

Creativity – The presenter adequately utilizes innovative presentation methods.

Overall Project – Project generates adequate interest from the other members of the class.

#### **INCOMPETENT**

Written Communication

Fails to adequately define the problem that the system is being designed to solve.

The content presented is irrelevant to the business problem reviewed and demonstrates inadequate analytical procedures to solve the problem.

The language of the documentation is confusing and difficult to understand.

Material presented is disorganized.

Documentation contains grammatical and typographical errors.

**Oral Communication** 

Comments demonstrate that the presenter has little or no insight and knowledge about the contents of the project documentation package.

Clarity- Presenter inadequately communicates the organizations' problem(s), the solution(s), and the methodologies used to obtain the solution(s).

Creativity – The presenter utilizes no innovative presentation methods.

Overall Project – Project fails to generate any interest from the other members of the class.

#### Criterion for success

This project documentation and oral presentations account for 50% of the students' grade. The percentage of students to be rated at least competent(C) should be 90%. The percentage of students to be rated superior (A) should be 20%. Approximately 75% of the projects completed by students in the Advanced Systems Analysis and Design course will receive the highest possible evaluation from respondents of the organization.

#### **Outcome 2 Details**

#### **Description and Methodology**

#### **Outcome Description**

Project documentation for ISM 4133 should demonstrate in-depth content knowledge of the principles, methodologies and practices of the Systems Analysis and Design field. The documentation should stand-alone (i.e., it should assume that the reader has no knowledge of either the organization or the application). The documentation should also demonstrate technical skills representing the practical application of systems analysis and design principals in the identification and analysis of system problems and proposed system solutions.

#### **Implementing Strategy:**

Projects from each section of ISM 4133 will be evaluated for the fall and spring semesters

#### **Assessment Method:**

Project documentation and oral presentations for the Systems Analysis and Design course will be assessed based on a rubric developed and utilized across all sections of the course and which will be shared with the students. The rubric will be used to assess students' performance in the three categories outlined above. (See Assessment method for Outcome 1 for the scoring of the rubric.)

#### **Criterion for success**

This project documentation and oral presentations account for 50% of the students' grade. The percentage of students to be rated at least competent (C) should be 90%. The percentage of students to be rated superior (A) should be 20%. Approximately 75% of the projects completed by students in the Advanced Systems Analysis and Design course will receive the highest possible evaluation from respondents of the organization.

#### **Outcome 3 Details**

#### **Description and Methodology**

#### **Outcome Description**

In ISM4133 Students will have the opportunity to examine and analyze "real world" problems within an organization. Students will then utilize the content knowledge obtained within the course to demonstrate analytical thinking in the practical application of the tools and processes used by systems developers to analyze, design, manage and construct information systems for the proposed solution.

#### **Implementing Strategy:**

Projects from each section of ISM 4133 will be evaluated for the fall and spring semesters

#### **Assessment Method:**

Project documentation and oral presentations for the Systems Analysis and Design course will be assessed based on a rubric developed and utilized across all sections of the course and which will be shared with the students. The rubric will be used to assess students' performance in the three categories outlined above. (See Assessment method for Outcome 1 for the scoring of the rubric.)

#### Criterion for success

This project documentation and oral presentations account for 50% of the students' grade. The percentage of students to be rated at least competent (C) should be 90%. The percentage of students to be rated superior (A) should be 20%. Approximately 75% of the projects completed by students in the Advanced Systems Analysis and Design course will receive the highest possible evaluation from respondents of the organization.

# Outcome 4 Details Description and Methodology

#### **Outcome Description**

ISM 4117 Data Mining & Predictive Analytics: Commencing with several singular technique projects and concluding with the comprehensive semester project, students will reinforce their oral skills by way of presentations as well as written and critical thinking skills by the use of executive memos requiring quantitative analysis and evaluation. Students in ISM4117 will demonstrate proficiency in applying data mining analytical techniques on an advanced real world business problem that examines a large amount of data to discover new information in addition to analyzing and evaluating technique effectiveness by presenting a self-designed semester project. ISM 4117 Data Mining & Predictive Analytics: Commencing with several singular technique projects and concluding with the comprehensive semester project, students will reinforce their oral skills by way of presentations as well as written and critical thinking skills by the use of executive memos requiring quantitative analysis and evaluation. Students in ISM4117 will demonstrate proficiency in applying data mining analytical techniques on an advanced real world business problem that examines a large amount of data to discover new information in addition to analyzing and evaluating technique effectiveness by presenting a self-designed semester project.

#### **Implementing Strategy:**

Due to faculty changes the implementing strategy was changed to the following: All students in all sections of ISM 4117 will be assessed based on exams and term project.

#### **Assessment Method:**

Due to faculty changes assessment method was changed to the following:

Over the course of the semester 12 assessments questions will be administered within midterm and final exams. The questions which are representative samples of both declarative and technical skill questions and cover key topics aligned with the learning objectives of the course, are evaluated for this assessment. Additionally, the term project completed by the students in the course is used to assess students' ability to apply data mining knowledge on a real dataset. Three levels of ranking are assigned to the projects: superior, competent and not competent.

#### **Criterion for success**

The percent of correct responses in the declarative and technical skill questions should be 73% which is equal to a passing grade of "C".

The percentage of students to be rated competent, a grade of C or higher in the course, should be at least 75%.

#### **Outcome 1 Details**

#### **Description and Methodology**

#### **Outcome Description**

QMB3600: Students completing QMB3600, a business core course, will demonstrate proficiency in the use of quantitative methods and decision making tools and techniques for business applications. Students will demonstrate content knowledge and critical thinking skills using probabilistic and deterministic business models in administrative and operational problem solving and decision-making.

**Implementing Strategy** A cumulative multiple choice question final exam is administered during the Fall and Spring semesters to all sections of QMB3600.

The exam includes 16 specific questions that represent each topic in the course.

Instructors teaching the course have an opportunity to submit questions for the exam pool and to review the exam questions before it is administered each semester.

The exam measures student performance in probabilistic and deterministic models.

**Assessment Method.** A 32 question exam (the 16 specific assessment questions are embedded) is administered online via Canvas.

To reduce dishonesty during test taking, the exams employ best practices such as the use of proctoring software, limited exam time and one question presented at a time.

The data will be used to determine the reliability of the exam thereby providing an important benchmark for future modifications in our final exam.

The data should provide a clear understanding of the content knowledge strengths and weaknesses of our students which can be used to improve student learning outcomes.

#### **Criterion for success**

Students should demonstrate an overall average of 73% or greater for correct responses in each of the content knowledge areas which is equal to a passing grade of "C".

The percentage of students to be rated competent, a grade of C or higher in the course, should be at least 73%.

#### **Outcome 2 Details**

#### **Description and Methodology**

#### **Outcome Description**

MAN 3506: Students who successfully completing MAN 3506, a business core course, will demonstrate content knowledge and critical thinking skills in Operations Management, and its importance in increasing competitiveness, productivity, and quality in the production of goods and services.

#### **Implementing Strategy**

Traditionally MAN3506 Students' knowledge and critical thinking skills in operations management is measured via a targeted, comprehensive final exam. The exam serves as a comprehensive assessment of operations management knowledge and skills. The final exam is counted at least 30% of the course grade. For the Spring 2020 semester, a variety of grading policies were implemented because of the Covid-19 epidemic, which forced the University to convert Face-to-face classes to online classes in the middle of the semester. This change forced many sections to alter the evaluation criterions.

#### **Assessment Method:**

For the fall 2019 semester all sections used our previously established approach which is based on embedding 30 assessment problems into a minimum fifty-problem final exam. Various assessment criterions were adopted in the Spring 2020 semester, largely enacted by the Covid-19 pandemic. The assessment methods implemented in the Spring 2020 semester include using group project, case studies, different test banks for final assessment exam, quizzes, and other grading policies.

#### **Criterion for success**

Student should score an overall average 73% or higher in each of the content knowledge areas which is equal to a passing grade of "C". The passing rate for all MAN 3506 sections combined is above 80%.

#### **Outcome 5 Details**

#### **Description and Methodology**

#### **Outcome Description**

ISM 3011 Students will demonstrate proficiency in key software programs (spreadsheets) to their applications of business practices.

#### **Implementing Strategy:**

Students are required to take ISM 3011 (Management Information Systems) for the program. This course teaches students advanced skills in spreadsheet techniques (using Microsoft Excel), which will be assessed. It is taught in multiple sections by various instructors in different locations and formats. Beginning in the 2018-19 academic year, we implement assessment methodology based on Microsoft Office Specialist (MOS) exams.

#### **Assessment Method:**

Beginning in the 2018-19 academic year, we implement assessment methodology based on Microsoft Office Specialist (MOS) Excel 2016 exams. This new assessment method was approved by the Associate Dean to start piloting in the calendar year 2018-2019, during which students can opt in to take the MS Excel 2016 exam. Starting in the calendar year 2019-2020, all students in all sections of ISM 3011, with the exception of online BBA, eight-week accelerated, and summer course, are required to take MOS Excel exam, and the assessment will be comprehensive. The exam is fully covered by FAU: Students can take MOS exam at any certified testing centers, including those in FAU, and need only pay the sitting fees. The implementation of this new assessment in Spring 2020 was unfortunately disrupted by COVID-19. Due to the closing of school as well as most testing centers starting in March, it was not possible to have students taking the MOS exam. Therefore, the only available assessment data is from Fall 2019.

#### **Criterion for success**

We are targeting 70% passing rate of Microsoft Office Specialist (MOS) exams.

# MISTOM - Masters of Science (Information Technology and Management) Learning Goals (2019-2020)

**Learning Goal 1:** Students will demonstrate the ability to analyze and articulate the information technology investment strategies that align business strategies and encompass elements of an organization's functional processes, work practices, and human resource capital.

#### **Course(s) Used for Assessing this Learning Goal:**

 (ISM 6026) Management of Information Systems and Technology: A study and evaluation of information systems: types, development and use. Emphasis is on understanding information systems in the context of managerial use, problems, and opportunities.

Spring 2020	Target	Overall Student Success
Superior	45%	36%
Competent	55%	61%
Not Competent	0%	3%

• (ISM 6368) Enterprise Information Technology Service Management: Course focuses on the information technology manager's role in coordinating with and providing service to other business functions. Discussion on internationally recognized best practices in delivering true value at the lowest total cost of ownership.

Fall 2019	Target	Overall Student Success
Superior	45%	11%
Competent	55%	89%
Not Competent	0%	0%

#### Comments from the course instructor:

There was a decrease in Superior assessments for both the presentations and final grades.

Depending on the student's College affiliation (e.g. CoB or CoE) and their degree (MS IT&M or MAC), they may or may not take the Business Communications Program writing and presentation course. As a result, paper scores may vary. We will continue to work with the Business Communications Program Director to address, if possible, this knowledge gap.

The 2019 fall semester was fully online as requested by the ITOM department. Several online communication tools (i.e. Go to meeting, etc.) were used to facilitate the needed interactions. It is evident from the papers and presentation that some form of face-to-face (WebEx, etc.) is required to communicate the ITIL concepts.

The need for Business Communications Program writing and presentation skills for non-CoB students continues to be an issue.

**Learning Goal 2:** Students will demonstrate an ability to understand sourcing issues involving global IT providers and teams to apply this knowledge for selecting and evaluating sourcing partners.

#### **Course(s) used for Assessing this Learning Goal:**

• (ISM 6509) Information Technology Sourcing Management: Course is designed to assist students in developing the knowledge and skills needed to work with IT service providers and processes. IT focuses on the concepts and methods associated with designing, planning, and contracting for IT infrastructure and applications.

Spring 2020	Target	Overall Student Success
Superior	40%	87.5%
Competent	60%	12.5%
Not Competent	0%	0%

#### Comments from the course instructor:

Bring an update on the cases to reflect the current trends in global outsourcing industry Meeting comments:

Address the influence of COVID19 on online learning.

Spring data will be spotty.

Industry difficulties are reflected on the data.

7 year program review needs our assessment data? Integrating data for the review. 2011 stops phd.

## The following is the required feedback from each AACSB program "Closing-the-Loop" exercise.

- Meeting date
- 2. Issues (past or present)
- 3. Findings/recommendations
  - New courses
  - · Course sequencing/pre-requisites
  - Modified courses
  - Coordination among courses
  - New admission standards
  - · Remedial work
  - · Faculty development
  - New extracurricular activities
- 4. Action items with suggested due date

## **Appendix 2: Abbreviated Faculty CVs**

#### **Sunil Babbar**

Professor, Department of Information Technology and Operations Management (ITOM) at the College of Business.

Research interests: Quality management, service operations, business ethics, and social networks

#### **Professional preparation**

Kent State University, Ohio, USA	Operations Management	Ph.D.	1988	,
Kent State University, Ohio, USA	Business	M.B.A.	1983	
Meerut University, U.P., India	Economics	M.A.	1979	

#### **Appointments**

Since 2011	Professor, ITOM, Florida Atlantic University
2001-2011	Associate Professor, ITOM, Florida Atlantic University
1998-2001	Assistant Professor, ITOM, Florida Atlantic University
1997-1998	Visiting Assistant Professor, Department of Management, University of Missouri-Columbia
1990-1997	Assistant Professor, Department of Management, Kansas State University
1987-1990	Assistant Professor, Department of Management, Bryant College
1983-1987	Teaching Fellow, Kent State University
1980	Director and Operations Manager, Sainik Transporters, India

#### Publications (10 samples from recent years):

- Koufteros, X. A, Babbar, S., Behara, R.S., Baghersad, M. 2020. OM Research: Leading Authors and Institutions, *Decision Sciences* (ABS 3), *Forthcoming*.
- Babbar, S., Koufteros, X., Bendoly, E., Behara, R., Metters, R. and Boyer, K. 2020. Looking at Ourselves: Lessons about the Operations Management Field Learned From Our Top Journals, *Journal of Operations Management* (ABS 4\*), 66, pp. 349-364.
- Babbar, S., Koufteros, X.A., Behara, R.S. and Wong, C.W.Y. 2019. SCM Research Leadership: The Ranked Agents and their Networks, *Supply Chain Management: An International Journal* (ABS 3), 24(6), pp. 821-854.
- Babbar, S., Behara, R.S., Koufteros, X.A. and Wong, C.W.Y. 2018. Charting Leadership in SCM Research from Asia and Europe, *International Journal of Production Economics* (ABS 3), 203, pp. 350-378.
- Babbar, S., Behara, R.S., Koufteros, X.A. and Huo, B. 2017. Emergence of Asia and Australasia in Operations Management Research and Leadership, *International Journal of Production Economics* (ABS 3), 184, pp. 80-94.
- Behara, R.S., Babbar, S. and Smart, P.A. 2014. Leadership in OM Research: A Social Network Analysis of European Researchers", International Journal of Operations and Production Management (ABS 4), 34(12), pp. 1537-1563.
- Babbar, S., Koufteros, X. and Jayaram, J. 2012. Expanding the Quality Paradigm for Contemporary Realignment: An Ethics Perspective, *International Journal of Services and Operations Management*, 12(3), pp. 309-331.
- Babbar, S. 2010. Teaching Ethics for Quality as an Innovation in a Core Operations Management Course, *Decision Sciences Journal of Innovative Education*, 8(2), pp. 361-366. [This paper is cited in the leading OM textbook by Krajewski et. al. and its content forms much of the section on "Ethics and Quality" of this textbook.]
- Koufteros, X., Babbar, S. and Kaighobadi M. 2009. A Paradigm for Examining Second-Order Factor Models Employing Structural Equation Modeling", *International Journal of Production Economics* (ABS 3), 120(2), pp. 633-652.

• Babbar, S. and Koufteros, X. 2008. The Human Element in Airline Service Quality: Contact Personnel and the customer, *International Journal of Operations & Production Management* (ABS 4), 28(9), pp. 804-830. [Published as the lead article.]

#### Journals Currently Serving on as an Editorial Board Member:

- International Journal of Operations & Production Management (2017-present)
- Decision Sciences Journal of Innovative Education (2010-present)
- International Journal of Services and Operations Management (2004-present)
- International Journal of Integrated Supply Management (2009-present)

#### Research grants and awards (recent years)

- 2020: Recipient of the Dean's \$20,000 Summer Research Grant of the College of Business
- 2019: Recipient of the Dean's \$10,000 Summer Research Grant of the College of Business
- 2017: Recipient of the Dean's \$10,000 Summer Research Grant of the College of Business
- 2016: Recipient of the Dean's \$10,000 Summer Research Grant of the College of Business
- 2015: Recipient of the Dean's \$10,000 Summer Research Grant of the College of Business
- 2015: Best Reviewer Award of the Decision Sciences Journal of Innovative Education
- 2011: Best Reviewer Award of the Decision Sciences Journal of Innovative Education
- 2010: Best Reviewer Award of the Decision Sciences Journal of Innovative Education
- 2010: Recipient of the Dean's \$10,000 Top-Tier Summer Research Grant of the College of Business

#### Teaching awards and recognitions received at FAU

- 2016: Recipient of the Excellence and Innovation in Undergraduate Teaching Award in the College of Business
- 2012: Recipient of the Excellence and Innovation in Undergraduate Teaching Award in the College of Business and also at the University level
- 2007: Recipient of the \$10,000 Stewart Distinguished Professorship Award of the College of Business for teaching excellence
- 2006: Nominated (unsolicited) by students for the University's Distinguished Teacher Award
- 2006: Awarded a Certificate of Recognition by the Dean upon being selected as one of four finalists for the Stewart Distinguished Professorship Award of the College of Business for teaching excellence
- 2005: Awarded a *Certificate of Recognition* by the Dean upon being selected as one of four finalists for the *Stewart Distinguished Professorship Award* of the College of Business for teaching excellence
- 2004: Recognized in *Who's Who Among America's Teachers* upon nomination (unsolicited) by Deans List students at FALI
- 2003: Nominated (unsolicited) by students for the University's Distinguished Teacher Award
- 2001: Recipient of the University \$5,000 Teaching Incentive Program (TIP) Award for teaching excellence
- 2001: Recipient of the Excellence and Innovation in Undergraduate Teaching Award in the College of Business

#### Milad Baghersad

Assistant Professor, Department of Information Technology and Operations Management (ITOM) at College of Business.

Research interests: Supply Chain Management, Supply Chain Disruptions, Disaster Resilience, Machine Learning, Financial Data

#### **Professional preparation**

Virginia Tech, Virginia, USA	<b>Business Information Technology</b>	Ph.D.	2018
University of Tehran, Tehran, Iran	Industrial Engineering	M.S.	2013
K. N. Toosi University of Technology, Tehran, Iran	Industrial Engineering	M.S.	2011

#### **Appointments**

2019-present Assistant Professor, ITOM, Florida Atlantic University

2018-2019 Visiting Assistant Professor, Department of Operations & Supply Chain Management, Cleveland State University

#### **Publications (10 samples):**

- Baghersad, M., & Zobel, C. W. (2021). Assessing the extended impacts of supply chain disruptions on firms: An empirical study. *International Journal of Production Economics*, 231, 107862.
- Zobel, C. W., MacKenzie, C. A., Baghersad, M., & Li, Y. (2020). Establishing a frame of reference for measuring disaster resilience. *Decision Support Systems*, In Press.
- Koufteros, X.A., Babbar, S., Behara, R.S. and Baghersad, M. (2020), OM Research: Leading Authors and Institutions. *Decision Sciences*, In Press.
- Mena, C., Melnyk, S. A., Baghersad, M., & Zobel, C. W. (2020), Sourcing decisions under conditions of risk and resilience: a behavioral study, *Decision Sciences*, 51, 985-1014.
- Zobel, C. W., & Baghersad, M. (2020), Analytically Comparing Disaster Resilience across Multiple Dimensions: Leveraging 311 Data, *Socio-Economic Planning Sciences*, 69, 100679.
- Nasri, L., Baghersad, M., Gruss, R., Marucchi, N., Abrahams, A. S., & Ehsani, J. P. (2018). An investigation into online videos as a source of safety hazard reports, *Journal of Safety Research*, 69, 89–99.
- Baghersad, M., & Zobel, C. W. (2015). Economic impact of production bottlenecks caused by disasters impacting interdependent industry sectors. *International Journal of Production Economics*, 168, 71–80.
- Torabi, S. A., Baghersad, M., & Mansouri, S. A. (2015). Resilient supplier selection and order allocation under operational and disruption risks. *Transportation Research Part E*, 79, 22–48.
- Azadeh, A., Baghersad, M., Farahani, M. H., & Zarrin, M. (2015). Semi-online patient scheduling in pathology laboratories. *Artificial Intelligence in Medicine*, 64(3), 217–226.
- Azadeh, A., Hosseinabadi Farahani, M., Torabzadeh, S., & Baghersad, M. (2014). Scheduling
  prioritized patients in emergency department laboratories. *Computer Methods and Programs in Biomedicine*, 117(2), 61–70.

#### **Courses taught**

- Advanced Business Analytics (Graduate Level), FAU, 2019-2020
- Data Mining and Predictive Analytics, FAU, 2019-2020
- Introduction to Operations Management, Cleveland State University, Fall 2018 and Spring 2019
- Introduction to Business Analytics, Cleveland State University, Fall 2018
- Applied Business Statistics, Cleveland State University, Spring 2019
- Mathematical Models for Business (Graduate Level), Cleveland State University, Summer 2019
- Quantitative Methods II, Virginia Tech, Summer 2017

- Reviewers: International Journal of Production Economics, Computers & Industrial Engineering,
  Journal of Cleaner Production, IEEE Transactions on Engineering Management, Journal of Supply
  Chain and Operations Management, Socio-Economic Planning Sciences, Decision Sciences
  Journal of Innovative Education, Patterns, ISCRAM Conferences (2015 to 2020), DSI Conference
  (2017).
- Vice President of Iranian Society at Virginia Tech (ISVT), 2017-2018.

#### Ravi S. Behara

Professor, Department of Information Technology and Operations Management (ITOM) at College of Business.

Research interests: operational risk analysis, healthcare operations, analytics, service operations

### **Professional preparation**

Manchester Metropolitan University, UK.	PhD	Service Operations Management	1989
Indian Institute of Science, Bangalore, India.	BS	Electrical Engineering	1981
Bangalore University, Bangalore, India.	BS	Physical Sciences	1978

#### **Appointments**

2015	Professor, Florida Atlantic University, Boca Raton, FL
2011-2012	Research Staff (unpaid appt.), Cleveland Clinic Florida, Weston, FL
1998-2015	Assistant/Associate Professor, Florida Atlantic University, Boca Raton, FL
1996-1998	Associate Professor, George Mason University, Fairfax, VA
1992-1996	Assistant/Associate Professor, SFA State University, TX
1991-1992	Research Fellow, University of Southern California, Los Angeles, CA and Adjunct Faculty,
	National University, San Diego, CA
1989-1991	Lecturer, Univ. of Manchester Institute of Science & Tech., Manchester, UK
1986-1989	Research Assistant, Manchester Metropolitan Univ., Manchester, UK
1981-1986	Electrical Engineer, Tata Electric Cos., India and Saudi Arabia

### **Publications (10 samples from last 5 years):**

- Koufteros, X., Babbar, S., Behara, R., and Baghersad, M. (2020), OM Research: Leading Authors and Institution, Decision Sciences, June 2020, https://doi.org/10.1111/deci.12452
- Babbar, S., Koufteros, X., Bendoly, E., Behara, R., Metters, R. and Boyer, K. (2020), Looking at Ourselves: Lessons about the Operations Management Field Learned from Our Top Journals, Journal of Operations Management, Vol. 66, Issue 3, April 2020, pp. 349-364
- C. Baechle, C.D. Huang, A. Agarwal, R. Behara and Jahyun Goo (2020), Latent Topic Ensemble Learning for Hospital Readmission Cost Optimization, European Journal of Operations Research, Vol. 281, Issue 3, March 2020, pp. 517-531
- Piyush, J., A. Agarwal, A., R. Behara and C. Baechle, (2019), HPCC based framework for COPD readmission risk analysis, Journal of Big Data, 6, 26, 2019 doi:10.1186/s40537-019-0189-0.
- Babbar, S., Koufteros, X., Behara, R.S. and Wong, C.W.Y. (2019), SCM research leadership: the ranked agents and their networks, Supply Chain Management, Vol. 24 No. 6, Oct 2019, pp. 821-854.
- Huang, C.D., J. Goo, R.S. Behara, A. Agarwal (2018), Clinical Decision Support System for Managing COPD-Related Readmission Risk, Information Systems Frontiers, published online 17 Oct 2018: https://link.springer.com/article/10.1007/s10796-018-9881-4
- Babbar, S., R.S. Behara, X. Koufteros, C.W.Y. Wong (2018), Charting Leadership in SCM Research from Asia and Europe, International Journal of Production Economics, 203 (Sept 2018), 350-378.

- Agarwal, A., C. Baechle, R.S. Behara, X. Zhu (2018), A Natural Language Processing Framework for Assessing Hospital Readmissions for Patients with COPD, IEEE Journal of Biomedical and Health Informatics, March 2018, 22 (2), 588-596.
- Babbar, S., R.S. Behara, X. Koufteros, B. Huo (2017), Emergence of Asia and Australasia in Operations Management Research and Leadership, International Journal of Production Economics, 184 (Feb 2017), 80-94.
- Agarwal, A., C. Baechle, R.S. Behara, V. Rao (2016), Multi-Method Approach to Wellness Predictive Modeling, Journal of Big Data, 3:15.

### **Synergistic activities**

- Member: Interprofessional Advisory Group (IAG) for FAU's Ed and Ethel Moore Alzheimer's Disease Research project (2020)
- Steering Committee Member: Palm Beach County Healthcare Coalition (2017-2020)
- Vice-President for the Production and Operations Management Society (POMS) College of Service Operations (2013-2014)
- Co-Chair Mini-Track on Healthcare Analytics at 20th Americas Conference on Information Systems (AMCIS 2014). Premier IT Conference.
- Member: Boca Raton Regional Hospital Care Coordination Council (2012-13)
- Co-Chair for the Service Operations Management track at the 24th Annual Production and Operations Management Conference (2013). Premier Operations Conference.
- Co-Chair Mini-Track on Health Information Technology at 18th Americas Conference on Information Systems (AMCIS 2012). Premier IT Conference.
- Advisor: Conducted study of Delray Beach Green House Gas Inventory (2010-2012).

#### **External funding**

- Health Resources and Services Administration (HRSA) Role: Analyst 2018-2022
  - Caring-based Academic Partnerships in Excellence (CAPE) RNs in Primary Care project
     [\$2.8M]
  - Caring-based Academic Partnerships in Excellence: Veteran RNs in Primary Care (CAPE-V) [\$1.5M]
- Health Resources and Services Administration (HRSA) Role: Analyst 2016-2019
  - Caring-based Academic Practice Partnerships (CAPP) to Enhance Nurse Practitioner [NP] Readiness and Willingness-to-Practice in Rural and Underserved Communities [\$2M]
- National Science Foundation (NSF)
   Role: Co-PI
   2016-2019
  - Industry University Cooperative Research Center (NSF/IUCRC) Phase II I/UCRC Florida Atlantic University Site of Center for Health Organization Transformation (CHOT) [\$300K]
- Palm Health Foundation
   Role: PI
   2015-2018
  - Developing a Learning Community for Elder-Care Services in Palm Beach County [\$100K]
- National Science Foundation (NSF)
   Role: Co-PI
   2014-2016
  - A Clinical Predictive Model Based Smart Decision Support System for Congestive Obstructive Pulmonary Disease (COPD) related Re-hospitalization [\$200K]
- National Science Foundation (NSF)
   Role: Co-PI
   2012-2016
  - Design of Medical Information Systems [\$200K]

#### **Pauline Chin**

Senior Instructor

College of Business, Information Technology and Operations Management Dept., FAU

Research interests: Adoption and management of information technology in developing and developed regions inclusive of information technology governance. Technology in education and the impact of technology on the economies of developing regions.

#### **Education**

University of Florida	Business Administration	PhD	2001
(C	Decision and Information Sciences)		
Florida Atlantic University	Educational Technology	M.Ed.	2010
Pennsylvania State University	<b>Business Administration (MIS)</b>	MS	1990

#### **Academic Appointments**

2017—present Senior Instructor, Department of Information Technology and Operations Management,	
Florida Atlantic University, USA	

2004—2017	Instructor, Department of Information Technology and Operations Management, Florida
	Atlantic University, USA

2001 – 2004 Assistant Professor, Department of Information Technology and Operations Management, Florida Atlantic University, USA

#### **Publications** (samples from last 5 years)

- Chin, P.: "The Potential Impact of Massive Open Online Courses On Technology Education and Globalization" - EDULEARN19 Proceedings, 11th International Conference on Education and New Learning Technologies, Palma, Spain. 1-3 July, 2019. ISBN: 978-84-09-12031-4 / ISSN: 2340-1117 doi: 10.21125/edulearn.2019, Publisher: IATED, Pages: 9959-9963, Publication year: 2019
- Chin, P.: "Computer Technology Engagement in Society and in College Majors" INTED2016
   Proceedings, 10th International Technology, Education and Development Conference
   Valencia, Spain. 7-9 March, 2016. ISBN: 978-84-608-5617-7 / ISSN: 2340-1079
   doi: 10.21125/inted.2016 Publisher: IATED, Pages: 1939-1945, Publication year: 2016

- SESSION CHAIR: MASSIVE OPEN ONLINE COURSES (MOOC) EDULEARN2019 11th annual International Conference on Education and New Learning Technologies, Palma de Mallorca (Spain), July 1-3, 2019. Session time: Monday, July 1st, 2019. Session type: ORAL
- Judge of Broward Undergraduate Research Grants Awards Spring 2015 Reviewed and ranked
   12 Research Project Proposals.
- ITOM liaison for the Broward Campus advisors and students to promote MIS majors and minors and to answer questions on the programs. 2011.
- Faculty Advisor Student Club Professional Business Leaders of America 2009-2011.

#### **Tamara Dinev**

Department Chair and Professor, Department of Information Technology and Operations Management (ITOM) at College of Business.

Research interests: information privacy, avoidance and prevention of negative Information Technologies, information security – organizational and individual issues and behavior models, information security and medical records

### **Professional preparation**

Florida Atlantic University, Florida, USA	Theoretical Physics	Ph.D.	1997
Sofia University, Sofia, Bulgaria	Applied Physics	M.S.	1985

# **Appointments**

2013	Professor, ITOM, Florida Atlantic University
since 2011	Department Chair, ITOM, Florida Atlantic University
2010-2011	Acting Department Chair, ITOM, Florida Atlantic University
2008-2013	Assoc. Professor, ITOM, Florida Atlantic University
2002-2008	Assistant Professor, ITOM, Florida Atlantic University
2000-2002	Visiting Assistant Professor, ITOM, Florida Atlantic University
1999-2000	IBM Senior Software Engineer
1997 – 2000	Senior Consultant, Digitron Consulting

### **Publications (10 samples from last 5 years):**

- Keil, M., Culnan, M., Dinev, T. et al. 2019 Data Governance, Consumer Privacy, and Project Status Reporting: Remembering H. Jeff Smith. Information Systems Frontiers, vol 21, 1207–1212.
- Gerlach, J., Buxman, P., Dinev, T. 2019 'They're All the Same!' Stereotypical Thinking and Systematic Errors in Users' Privacy-Related Judgments about Online Services, Journal of the Association for Information Systems, 20(6) pp. 787-823
- Lowry, P.J., Dinev, T., and Willison, R. 2017 Why Security and Privacy Research Lies at the Centre of the Information Systems (IS) Artefact. European Journal of Information Systems, 26(6) pp.546–563
- Dinev, T., Albano, V., Xu, H., D'Atri, A., and Hart, P. 2016. Individual's Attitudes towards Electronic Health Records – A Privacy Calculus Perspective, in A. Gupta et al. (eds.), Advances in Healthcare Informatics And Analytics, Annals of Information Systems, 19, pp. 19-50
- Dinev, T., McConnell, A. R., Smith, H. J. 2015 Informing Privacy Research through Information Systems, Psychology, and Behavioral Economics: Thinking Outside the "Apco" Box, Information Systems Research, 26(4), pp. 639-655.
- Dinev, T. 2014. Why would we care about privacy? European Journal of Information Systems, 23(2), pp. 97-102
- Dinev, T., Xu, H., Smith, H. J., and Hart, P. 2013. Information Privacy and Correlates: An Empirical Attempt to Bridge and Distinguish Privacy-Related Concepts, European Journal of Information Systems, 22(3), pp. 295-316.

#### **Synergistic activities**

- Guest Associate Editor, MIS Quarterly
- Associate Editor, European Journal of Information Systems
- Track Chair, IS Security and Privacy, for the *International Conferences on Information Systems* (ICIS), Shanghai, China, December 2011
- Associate Editor, International Conference on Information Systems (ICIS) 2009, 2010
- Session Chair, Academy of Management Annual Meeting, 2006
- Program Committee Member for TRUST 2010, 4th International Conference on Trust and Trustworthy Computing, June 22-24, 2011, CyLab/CMU, Pittsburgh, PA, USA,
- Program Committee Member for TRUST 2011, 3d International Conference on Trust and Trustworthy Computing, 21-23 June 2010, Berlin, Germany
- Program Committee Member, 9th International Conference on Mobile Business (ICMB) and the Global Mobility Roundtable (GMR), Athens, Greece, 13-15 June 2010, Athens, Greece
- Program Committee Member, 8th Annual Workshop on HCI Research in MIS, December 14, 2009 (Pre-ICIS), Phoenix, Arizona.

#### **External funding**

- Individuals' Information Privacy Concerns and Attitudes towards Electronic Health Records (EHR),
   Dean's Summer Research Grant, 2009.
- Defense Information Systems Agency (DISA), Department of Defense: Organizational Issues in Secure Communication Networks, August 2005-July 2006, \$70,000. (coPl)

# **Karen Chinander Dye**

Senior Instructor, Department of Information Technology and Operations Management (ITOM) at College of Business.

Research interests: Decision making under risk and uncertainty; effects of behavioral factors on operations management; reverse logistics and global supply chain management; sustainability and environmental management; risk and disaster management

#### **Professional Preparation**

University of Pennsylvania, USA	Decision Sciences/ Operations Management	Ph.D.	1997
University of Pennsylvania, USA	Decision Sciences	M.A.	1991
Gustavus Adolphus College, Min	nesota, USA Economics	B.A.	1989

### **Appointments**

2015 – present	Senior Instructor, Florida Atlantic University, College of Business
2011 – 2015	Instructor, Florida Atlantic University, College of Business
2008 – 2011	Visiting Assistant Professor, Florida Atlantic University, College of Business
2003 – 2008	Assistant Professor, Florida Atlantic University, College of Business
1997 – 2003	Assistant Professor, University of Miami, School of Business Administration
1996 – 1997	Instructor, University of Miami, School of Business Administration

#### **Publications**

- Chinander Dye, K., Eggers, J.P. and Shapira, Z. (2014). "Tradeoffs in a Tempest: Stakeholder Influence on Hurricane Evacuation Decisions," Organization Science, 25, 1009 1025.
- Chinander, K.R. and Schweitzer, M.E. (2003). "The Input Bias: The Misuse of Input Information in Judgments of Outcomes," Organizational Behavior and Human Decision Processes, 91, 243 253.
- Chinander, K.R. (2001). "Aligning Accountability and Awareness for Environmental Performance in Operations," Production and Operations Management, 10, 276 291.
- Chinander, K.R. and Schweitzer, M.E. (2000). "Judgments of Quality: Using Input Quantity to Evaluate Outcome Quality," in D. Fedor and S. Ghosh (Eds.), Advances in the Management of Organizational Quality, Volume 5, 193 – 214, JAI Press/ Elsevier Inc.
- Chinander, K.R., Kleindorfer, P.R., and Kunreuther, H.C. (1998). "Compliance Strategies and Regulatory Effectiveness of Performance-Based Regulation of Chemical Accident Risks," Risk Analysis, 18, 135 – 143.
- McNulty, P.J., Schaller, L.C., and Chinander, K.R. (1998). "Communicating under Section 112(r) of the Clean Air Act Amendments," Risk Analysis, 18, 191 1997.
- Schaller, L.C., McNulty, P.J., and Chinander, K.R. (1998). "Impact of Hazardous Substances Regulations on Small Firms in Delaware and New Jersey," Risk Analysis, 18, 181 189.

#### **Synergistic activities**

- Associate Editor, Journal or Operations Management, 2012 present
- Appointed Member, National Advisory Board, Gustavus Adolphus College, Economics and Management Department, 2012 – 2019
- Appointed member, OSCM Distinguished Scholar Selection Committee, Academy of Management Operations and Supply Chain Management Division, 2017 – 2018
- Interim Past Division Chair, Academy of Management Operations Management Division, 2015-16
- Chair, OM Scholar Selection Committee, Academy of Management Operations Management Division, 2015-2016; 2013-2014; 2011-2012 (member)
- Past Division Chair, Academy of Management Operations Management Division, 2013 2014
- Division Chair, Academy of Management Operations Management Division, 2012 2013
- Division Chair-Elect, Academy of Management Operations Management Division, 2011 2012
- Program Chair, Academy of Management Operations Management Division, 2010-2011
- Professional Development Workshop Chair, Academy of Management Operations Management Division, 2009-2010
- Secretary, Academy of Management Operations Management Division, 2002 2009
- Session Chair, Production and Operations Management Society Annual Meeting, Healthcare Operations Track, April 2006
- Program Committee, 2005 INFORMS Annual Meeting, Research Clinics Co-Chair
- Session Chair, Academy of Management Annual Meeting, Operations Management Division, 2004
- Invited Session Chair/ Organizer, INFORMS Annual Meeting, Reverse Supply Chains Cluster, 2003
- Program Committee, 2001 INFORMS Annual Meeting, Doctoral Colloquium Chair
- Session Chair, POMS Annual Conference, Environmental Issues Track, 2001
- Session Chair, Society of Judgment and Decision Making Annual Conference, 2000
- Program Committee, Behavioral Decision Research in Management Conference, 1998

### **Awards and External funding**

- Quality Matters Certification for MAN 6501 Operations Management, 2020 2025
- Excellence and Innovation in Undergraduate Teaching Award, Florida Atlantic University, 2020
- FAU Office of Undergraduate Research and Inquiry, Distinction through Discovery Curriculum New Assignment for MAN 4597, "Understanding Small Business Supply Chain Management Practices and Challenges", 2016–2018, \$1000.
- Florida Atlantic University, College of Business Summer Research Award, 2014, 2015, 2016
- Academy of Management, OM Division Outstanding Service Award, 2014
- Excellence and Innovation in Undergraduate Teaching Award, Florida Atlantic University, 2014
- Journal of Operations Management, Best Reviewer Award, 2012
- Academy of Management, Operations Management Division Best Reviewer Award, 2008
- FAU MacArthur Campus College of Business Exceptional Faculty Award, 2008
- Excellence and Innovation in Undergraduate Teaching Award, Florida Atlantic University, 2006
- FAU MacArthur Campus College of Business Exceptional Faculty Award, 2006
- Florida Atlantic University, College of Business, Dean's Summer Research Grant, 2006, 2004
- Nominated for FAU MacArthur Campus College of Business Exceptional Faculty Award, 2005
- One of six finalists, Distinguished Teacher of the Year Award, College of Business, FAU, 2004
- Excellence in Teaching Award, University of Miami School of Business, 2001

#### Mohsen Emadikhiav

Assistant Professor, Department of Information Technology and Operations Management (ITOM) at College of Business.

Research interests: Transportation and Logistics; Procurement Auction; Operations Management, Combinatorial Optimization; Data Analytics.

# **Professional preparation**

University of Connecticut (UConn), Connecticut, USA	Business Administration	Ph.D.	2020
Linkoping University (LiU), Linkoping, Sweden	Industrial Eng. & Mgmt.	M.Sc.	2015
Iran Univ. of Sci. and Tech. (IUST), Tehran, Iran	Industrial Engineering	B.Sc.	2013

#### **Appointments**

2020-present Assistant Professor, ITOM, Florida Atlantic University

#### **Publications:**

- Emadikhiav, Mohsen, Bergman, D., Day, R. (2020). Consistent routing and scheduling with simultaneous pickups and deliveries, *Production and Operations Management*, 29(8), 1937-1955.
- Mazdeh, M., Emadikhiav, M., Parsa, I. (2015). A heuristic to solve the dynamic lot sizing problem with supplier selection and quantity discounts, *Computers and Industrial Engineering*, 85, 33-43.
- Parsa, I., Emadikhiav, M., Mazdeh, M., Mehrani, S. (2013). A multi supplier lot sizing strategy using dynamic programming, *International Journal of Industrial Engineering Computations*, 4(1), 61-70.

#### **Courses taught**

- Operations Management, FAU, Fall 2020
- Business Information Systems, UConn, Spring 2020
- Operations Management, UConn, Spring 2018

- Website Chair: Conference on Principles and Practice of Constraint Programming (2019)
- Ad-Hoc Reviewer: Constraints; International Conference on the Integration of Constraint Programming, Artificial Intelligence, and Operations Research; The AAAI Conference on Artificial Intelligence.
- Session Chair: Production and Operations Management Society Conference (2019)
- Organizing Committee: UCONN School of Business PhD Program 30th Anniversary (2017)

### Lawrence Feidelman

Instructor, Department of Information Technology and Operations Management (ITOM)

Research interests: Healthcare information systems, Healthcare technology and delivery systems, information system security, social media and web site analysis, distance learning techniques, effects of the Internet on our lives

### **Professional preparation**

University of Pennsylvania, Pennsylvania CIS Ph.D. full credits 1965

University of Pennsylvania, Pennsylvania CIS M.S. 1963 New York University, New York Mathematics B.A. 1959

### **Appointments**

2020 Instructor, ITOM, Florida Atlantic University

2018-2020 Visiting Instructor, ITOM, Florida Atlantic University

2004- 2018 Adjunct Professor, ITOM, Florida Atlantic University

2000 - 2004 Palm Beach County Mediator/Arbitrator

1995 - 2000 Vice President, Phillips Business Information, Inc.

1971 - 1995, President, Management Information Corporation

#### **Synergistic activities:**

Member of the HIT committee of the South Florida Hospital and Healthcare Association (representing Florida Atlantic University)

Editor for Wiley, McGraw-Hill and Pearson

Member of ISACA and ACM

### **Stuart Diaz Galup**

Associate Professor, Department of Information Technology and Operations Management (ITOM) at College of Business.

**Research interests:** Information Technology Service Management

#### **Professional preparation**

Nova Southeastern University, Fort Lauderdale, USA Management D.B.A. 1994 Nova Southeastern University, Fort Lauderdale, USA Telecommunications Management MS 1988

# **Appointments**

2003	Associate Professor
1997 - 2003	Assistant Professor
1995 - 1997	Deputy Director, Palm Beach County Information Systems Service Department
1990 - 1995	Assistant Director, Broward Sheriff's Office Information Services Bureau
1982 - 1990	Programming Systems Supervisor, Miami-Dade Police Department

#### **Publications (10 samples from last 5 years):**

- Galup, S., Dattero, R., Quan, J. (2020). What do Agile, Lean, and ITIL mean to DevOps?. *Communications of the ACM*, 63(10), 48-53.
- Dattero, R., Galup, S. Kan, A. and Quan, J. (2017). IT Pays To Be Agile. *Journal of Computer Information Systems*, 57(3), 252-257.
- Galup, S. (2012). (Ed.), *Technology Applications and Advancements in Service Science, Management, and Engineering* (pp. xvii-xxv). Hershey, PA: Business Science Reference. ISBN13: 9781466615830, ISBN10: 1466615834
- Galup, S., Dattero, R., and Groll, J. (2011). DNA Model of IT Service Assets. International Journal of Service Science, Management, Engineering, and Technology, 2(2), 16-47.
- Quan, J., Dattero, R., Galup, S., and Dhariwal, K. (2011). The Determinants of Information Technology Wages. International Journal of Human Capital and IT professionals, 2(1), 48-65.
- Galup, S. and Dattero, R. (2010). A Five-Step method to tune your ITSM Processes. Information Systems Management Special Issue on Servitizing IT, 27(2), 156-167.
- Quan, J., Dattero, R. and Galup, S. (2010). Impact of Age on Information Technology Salaries.
   Editor: Mehdi Khosrow-Pour. Global, Social, and Organizational Implications of Emerging Information Resources Management: Concepts and Applications. Pennsylvania: Idea Group Publishing. ISBN13: 9781605669625, ISBN10: 1605669628, EISBN13: 9781605669632, pp. 403-420.

- Dissertation Committee Surani Vincent "Maturity of IT Risk Management Practices and Reporting Structure: An IT Manager Perspective," School of Accounting, Florida Atlantic University; dissertation committee member, 2013-2014.
- Dissertation Committee Robert Victor Benyon "An Investigation of Service Management Implementation in the Information Technology Sector" Department of Information Technology and Operations Management, Rhodes University – Grahamstown, South Africa; dissertation committee member, 2012.
- Program Evaluator: Computing Accreditation Commission of the Accreditation Board for Engineering and Technology to evaluate university degree programs in Information Systems. (2010 – present)

- Graduate Degree Program Reviewer: SUNY Empire State University, MS in Information Technology, Saratoga Springs, NY. (August 3, 2017).
- Editorial Review Board: Information Resource Management Journal (2008 present)
- Editorial Review Board: International Journal of Service Science, Management, Engineering, and Technology (2009 present)

# Jahyun Goo

Associate professor with the Information Technology and Operations Management Department since August 2009.

Research interests: cybersecurity, healthcare IT, tourism IT and IT sourcing management

### **Professional preparation**

SUNY at Buffalo, NY, USA	Management Information Systems	Ph.D.	2003
SUNY at Buffalo, NY, USA	Management Information Systems	MBA	1998

### **Appointments**

since 2009	Assoc. Professor, ITOM, Florida Atlantic University
2003 - 2009	Asst. Professors, ITOM, Florida Atlantic University
2004 2002	And Disference Deal of District Administration CHAIV

2001 -2003 Asst. Professors, Dept. of Business Administration, SUNY at Fredonia

#### **Publications (10 samples from last 5 years):**

- C. Yoo, Jahyun Goo, and H. R. Rao, "Is Cybersecurity a Team Sport? A Multilevel Examination of Workgroup Information Security Effectiveness," *MIS Quarterly*, (44:2), 2020, pp. 907-931.
- Kichan Nam, Jeff Baker, Norita Ahmad, and Jahyun Goo, "Determinants of Writing Positive and Negative Electronic Word-of-Mouth: Empirical Evidence for Two Types of Expectation Confirmation," *Decision Support Systems*, (129), 2020, pp. 1-24.
- C. Baechle, C.D. Huang, A. Agarwal, R. Behara and Jahyun Goo, "Latent Topic Ensemble Learning for Hospital Readmission Cost Optimization," *European Journal of Operational Research*, (281:3), pp. 517-5312020.
- C.D. Huang, Jahyun Goo, Ravi S. Behara, and Ankur Agarwal, "Clinical Decision Support System for Managing COPD-Related Readmission Risk," *Information Systems Frontiers*, (22), 2020, pp. 735-747.
- Kichan Nam, Jeff Baker, Norita Ahmad, and Jahyun Goo, "Dissatisfaction, Disconfirmation, and Distrust: An Empirical Examination of Value Co-Destruction through Negative Electronic Word-of-Mouth (eWOM)," Information Systems Frontiers, (22), 2020, pp. 113-130.
- C.D. Huang, Jahyun Goo, Chulwoo Yoo, and K. Nam, "Smart Tourism Technologies in Travel Planning: The Role of Exploration and Exploitation," *Information & Management*, (54:6), 2017, pp. 757-770.
- Chulwoo Yoo, Jahyun Goo, C.D. Huang, K. Nam and M. Woo, "Improving travel decision support satisfaction with smart tourism technologies: A framework of tourist elaboration likelihood and self-efficacy," *Technological Forecasting & Social Change*, (123), 2017, pp. 330-341.
- Jahyun Goo, C.D. Huang, and C. Koo, "Learning for Healthy Outcome: Exploration and Exploitation with Electronic Medical Records," *Information & Management*, (52), 2015, pp. 550-562.

- Guest Associate Editor, MIS Quarterly
- Coordinating Editor, *Information Systems Frontiers*
- Associate Editor, Information Technology Management
- Associate Editor, Decision Support Systems
- Associate Editor, International Conference on Information Systems
- Co-President of AIS Korean Chapter, 2016-2018
- Co-Program Chair, Post ICIS KrAIS Workshop, 2014-2016
- Co-Chair, Pacific Conference on Information Systems, IT sourcing and cloud computing track
- Co-Chair, American Conference on Information Systems, IT outsourcing mini-track

- Co-Chair, American Conference on Information Systems, Healthcare Analytics mini-track
- Co-Chair, American Conference on Information Systems, IT and food mini-track

# **External funding**

2016 – 2017	Co-PI for FLDOE Award # AWD-001097 (\$100,000)
1999 – 2001	Research Associate for NSF #9907325 (\$8,000)
2003	Research Fund from Canadian-American Studies Competition, the State University of New York
	at Buffalo, (\$1000)
2003 - 2004	Mark Diamond Research Fund from the State University of New York at Buffalo (\$1500)

### C. Jim Han, Ph.D.

Professor, Department of Information Technology and Operations Management, College of Business, Florida Atlantic University

Research interests: Dr. Han studies logistics systems and decision supporting systems, with most of his recent research focused on global supply chain management. Several other research interests encompass management information systems, artificial intelligence, and discrete systems modeling. He teaches courses on operations management, probability and statistics, artificial intelligence, systems modeling, object-oriented design and programming, computer systems evaluation, and quantitative methods for business. Dr. Han has published over sixty research articles, appearing in some of the most prestigious journals in Systems Engineering related fields. These include the Annals of CIRP, Journal of Manufacturing Systems, International Journal of Production Research, Transactions of the NAMRI, Journal of Manufacturing Technology Management, among others.

#### Professional preparation

Penn State, State Park, Pa., USA	Industrial Engineering	Ph.D. 1988
Penn State, State Park, Pa., USA	Industrial Engineering	M.S. 1985
Dalian University of Technology, Dalian, China	Mechanical Engineering	B.S. 1982

#### **Appointments**

2009 –	Professor, Department of ITOM, Florida Atlantic University
2002 – 2009	Professor, Department of Computer Science and Engineering, Florida Atlantic University
2001 – 2002	Professor, Department of Mechanical Engineering, Florida Atlantic University
1993 – 2000	Associate Professor, Department of Mechanical Engineering, Florida Atlantic University
1988 – 1993	Assistant Professor, Department of Mechanical Engineering, Florida Atlantic University
1993 – 1998	Associate Director, Faculty of the Manufacturing Systems Engineering, FAU
1988	Project Coordinator, National Forge Company, Irvine, Pennsylvania

# Publications (Samples from last 7 years)

Chao, Wang; Chun, Jin; Han, Chingping (Jim). (2016). Model and algorithm for multi-objective joint optimization of three-dimensional loading and CVRP, *Control and Decision (J)*, 31(5), 929-934

Chao, Wang; Chun, Jin; Han, Chingping (Jim). (2016). Multi-objective model and methods for capacitated vehicle routing problem facing different target preference, *Application Research of Computers (J)*, 33(8), 2270-2274

Lv, Miao; Chun, Jin; Higuchi, Yoshiyuki; Han, Chingping (Jim). (2014). Context-based Catering Recommendation Method Using Bayesian Network and Ontology, *ICIC Express Letters*, 8(2), 341-347

Mazouz, Abdelkader; Han, Chingping (Jim); Blandon, Jatni. (2014). Design Patterns and Object-Oriented Models of a Civil Biometric Service System, *China-USA Business Review*, 13(2), 1537-1514

Wang, Chao; Chun, Jin; Han, Chingping (Jim). (2014). A Multistage Algorithm for Multi-objective Joint Optimization of Loading Problem and Capacity Vehicle Routing Problem, *ICIC Express Letters, Part B, Applications: An International Journal of Research and Surveys*, 5(5), 1453-1459

Cardona, Aura-Maria; Roth, Zvi; Han, Chingping (Jim). (2014). Group Technology (GT) Applied to Biotechnology Automation, 2014 Florida Conference on Recent Advances in Robotics, Miami, FL

Cardona, Aura-Maria; Roth, Zvi; Han, Chingping (Jim). (2014). Modular Implementation of Laboratory Unit Operations (LUOs) for Automation of Biotechnology Protocols, 2014 Florida Conference on Recent Advances in Robotics, Miami, FL

Lv, Miao; Chun, Jin; Higuchi, Yoshiyuki; Han, Chingping (Jim). (2013). Ontology-based User Preferences Bayesian Model for Personalized Recommendation, *Journal of Computational Information Systems*, 9(16), 6579-6586

Wang, Chao; Chun, Jin; Han, Chingping (Jim). (2013). A Multistage Algorithm for Multi-objective Joint Optimization of Loading Problem and Capacity Vehicle Routing Problem, 2013 Sixth International Conference on Advanced Computational Intelligence (ICACI), Hangzhou, China, 251-255

Deng, Xiaoyi; Jin, Chun; Higuchi, Yoshiyuki; Han, Chingping (Jim). (2013). A Novel Collaborative Filtering Recommendation Method Combining Context Clustering and Social Network Analysis for Personalized Recommendation in Mobile E-Commerce, *INFORMATION*, an *International Interdisciplinary Journal*, 16(7(A)), 4555-4576

#### **External Funding**

Dr. Han has generated more than one million dollars in sponsored research at FAU. He has successfully led projects sponsored by the National Science Foundation, Ford Motor Company, IBM, Motorola, General Motor, Florida Power and Light Company, Dole Fresh Fruit Company, National Forge Company, among others. Dr. Han was a Co-Founder of the National Science Foundation University/Industry Consortium Research Center for Material Handling at FAU in 1990.

# **Chiang-Sheng Derrick Huang**

**Associate Professor** 

Department of Information Technology and Operations Management Florida Atlantic University

#### **Education**

Harvard University	Computer Science	PhD	1994
Harvard University	Applied Physics	MS	1989

#### **Academic Appointments**

2009—present Associate Professor, Department of Information Technology and Operations Management, Florida Atlantic University, USA

2003—2009 Assistant Professor, Department of Information Technology and Operations Management, Florida Atlantic University, USA

### **Journal Publications** (samples from last 10 years)

- C.W. Yoo, J. Goo, and **C.D. Huang** (2020) "Task Support of Electronic Patient Care Report (ePCR) Systems in Emergency Medical Services: An Elaboration Likelihood Model Lens," *Information and Management*, 57 (6), available online.
- C. Baechle, C.D. Huang, A. Agarwal, R.S. Behara, and J. Goo (2019) "Latent Topic Ensemble Learning for Hospital Readmission Cost Optimization." European Journal of Operations Research, 281 (3), 517-531.
- C.D. Huang, J. Goo, R.S. Behara, and A. Agarwal (2018) "Clinical Decision Support System for Managing COPD-Related Readmission Risk." Information Systems Frontiers, 1–13.
- C.D. Huang, J. Goo, K. Nam, and C.W. Yoo (2017) "Smart Tourism Technologies in Travel Planning: The Role of Exploration and Exploitation," Information and Management, 54 (6), 757-770.
- C.W. Yoo, J. Goo, C.D. Huang, K. Nam, and M. Woo (2017) "Improving Travel Decision Support Satisfaction with Smart Tourism Technologies: A Framework of Tourist Elaboration Likelihood and Self-Efficacy," Technological Forecasting and Social Change, 123, 330-341.
- J. Goo, C.D. Huang, and C. Koo (2015) "Learning for Healthy Outcome: Exploration and Exploitation with Electronic Medical Records," Information and Management, 52 (5), 550-562.
- C.D. Huang, R.S. Behara, and J. Goo (2014) "Optimal Information Security Investment in a Healthcare Information Exchange: An Economic Analysis," Decision Support Systems, 61, 1-11.
- C.D. Huang and R.S. Behara (2013) "Economics of Information Security Investment in the Case of Simultaneous Attacks," International Journal of Production Economics, 141 (1), 255-268.
- R.S. Behara, C.D. Huang, and Q. Hu (2010) "A System Dynamics Model of Information Security Investments," Journal of Information Systems Security, 6 (2), 30-44.

#### **Synergistic Activities**

• Senior Editor, Decision Support Systems, 2014-present

- Program Committee member, 2020 Data Science, Analytics, and Artificial Intelligence Conference, Florida Atlantic University, November 14, 2020.
- Scientific Advisory Board, The Instituto Superior para el Desarrollo de Internet (Higher Institute for Internet Development), Madrid, Spain, 2011-present
- Coordinating Editor, Information Systems Frontier, 2016-present
- Mini-Track Co-Chair, Information Systems, Food Industry, and Consumer Behavior, Americas Conference on Information Systems (2016-2020)
- Track Co-Chair, Cyber Security, Annual Meeting of the Decision Sciences Institute (2015, 2018, 2019)
- Mini-Track Co-Chair, Healthcare Analytics, Americas Conference on Information Systems (2014-2017)
- Program Committee, 10th Annual Security Conference, Las Vegas, NV, May 4-6, 2011
- Program Committee, International Workshop on Risk and Trust in Extended Enterprises (RTEE'2010),
   San Jose, CA, November 1-4, 2010

#### **External Funding**

Florida Department of Education Research Grant (FLDOE Award # AWD-001097), \$100,000,
 September 2016 – December 2017

# **Inkyoung Hur**

Assistant Professor, Department of Information Technology and Operations Management (ITOM) at College of Business.

Research interests: healthcare informatics, information security, data analytics, data visualization, and information system development

# **Professional preparation**

Florida International University, Florida, USA	<b>Business Administration</b>	Ph.D.	2016
Purdue University, Indiana, USA	Industrial Engineering	M.S.	2010

#### **Appointments**

2020.8 -	Assistant Professor, ITOM, Florida Atlantic University
2020-2020.5	Lecturer, Business Technology, University of Miami
2016 – 2019	Assistant Professor, Information Systems and Cybersecurity, Nova Southeastern
University	
2001 – 2006	Assistant Specialist, Samsung SDS

#### Publications (10 samples from last 5 years):

- Lau, N., Wang, L., Hur, I., and Clarke, M. The Influence of Cognitive Factors and Personality Traits on Mobile Device User's Information Security Behavior. *Issues in Information Systems*, 21. *forthcoming*
- Giwah, A., Wang, L., Levy, Y., and Hur, I. (2019). Empirical Assessment of Mobile Device Users' Information Security Behavior Towards Data Breach: Leveraging Protection Motivation Theory. Journal of Intellectual Capital, 21(2), 215-233. DOI:10.1108/JIC-03-2019-0063
- Hur, I., Cousins, K., and Stahl, B.C. (2019). A Critical Perspective of Engagement in Online Health Communities. *European Journal of Information Systems*, 28(5), 523-548.
- Alharthi, S., Levy, Y., Wang, L., and Hur, I. (2019). Employees' Mobile Cyberslacking and Their Commitment to the Organization. *Journal of Computer Information Systems*, 1-13. DOI: 10.1080/08874417.2019.1571455
- Kang, K., Altinkemer, K., and Hur, I. (2019). Mobile Coupons Delivery Problem: Postponable Online Multi-constraint Knapsack. *Decision Support Systems*, 116, 13-25.
- Samak, A. C., Hur, I., Kim, S. H., and Yi, J. S. (2016). An Experimental Study of Decision Process with Interactive Technology. *Journal of Economic Behavior & Organization*, 130, 20-32.

- Member for Korean Association of Information Systems (KrAIS), 2009-present
- Member for Korean American University Professors Association (KAUPA), 2009-present
- Reviewers for International Journal of Electronic Commerce, Database, Electronic Markets

### Mircea Marandici

Instructor, Department of Information Technology and Operations Management (ITOM) at College of Business.

Research interests: Mobile and Web technologies, Artificial Intelligence – societal, organizational and individual issues, labor impacts and behavior models

# **Professional preparation**

Syracuse University, NY, USA	Electrical Engineering	M.S.	1987
Polytechnic University, Brooklyn NY, USA	Electrical Engineering	B.S.	1985

### **Appointments**

2020	Instructor, ITOM, Florida Atlantic University
2016-2020	Adjunct, ITOM, Florida Atlantic University
2006-2013	Sr. Engineer, Program Manager, IBM Corporation, Boca Raton FL
1999-2006	Sr. Engineer, Development Manager, IBM Corporation, Boca Raton FL
Previously	Software and automation engineering, IBM East Fishkill NY and Boca Raton FL

# Publications (10 samples from last 5 years):

N/A

# **Synergistic activities**

- Guest Associate Editor, MIS Quarterly
- Program Committee Member for the 3<sup>rd</sup> FAU Data Science and Analytics Conference 2020
- ITOM Host, speed networking for the 2nd FAU Data Science and Analytics Conference 2019

### **External funding**

N/A

#### **David Menachof**

Associate Professor, Information Technology and Operations Management, College of Business

Current research interests include: global supply chain issues, supply chain security, risk and visibility, sustainable supply chain and logistics, financial techniques applicable to supply chain, logistics and operations management, liner shipping and containerization.

### **Professional preparation**

University of Tennessee, Knoxville, USA	<b>Business Administration</b>	Ph.D.	1993
University of Plymouth, United Kingdom	International Shipping	MSc	1993
University of Tennessee, Knoxville, USA	Transportation and Logistics	MBA	1984
University of Cincinnati, Ohio, USA	Economics	BA	1982

### **Appointments**

since 2017	Associate Professor, ITOM, Florida Atlantic University
2009-2017	Professor of Port Logistics, Peter Thompson Chair, University of Hull, UK
1999-2009	Senior Lecturer in Logistics and Distribution. City University London – Cass Business
	School , UK
1996-1999	Senior Lecturer in Maritime Business and Logistics, University of Plymouth, UK
1991-1996	Assistant Professor of Logistics and Marketing, University of Charleston, SC, USA
1985-1988	Operations Analyst and Pursers' Office, American Hawaii Cruises, Honolulu, USA
1984 – 1984	Traffic Analyst, Delta Steamship Lines, Teaneck, NJ, USA

# **Publications (10 samples from last 5 years):**

- Vu, T. P., Grant, D.B., and Menachof, D,(2020) "Exploring Logistics Service Quality in Hai Phong, Vietnam," The Asian Journal of Shipping and Logistics, Vol 36, No 2, pp 54-64.. https://doi.org/10.1016/j.ajsl.2019.12.001
- Colicchia, C., Creazza, A and Menachof, D.,(2019) "Managing Cyber and Information Risks in Supply Chains: Insights From an Exploratory Analysis," Supply Chain Management An International Journal, as part of a Chartered Institute of Logistics and Transport Seed Corn Grant https://doi.org/10.1108/SCM-09-2017-0289
- Kwesi-Buor, J., Menachof, D., and Talas, R. (2019), "Scenario Analysis and Disaster Preparedness for Port and Maritime Logistics Risks" *Accident Analysis and Prevention*, Vol.123, Pages 433-447 http://dx.doi.org/10.1016/j.aap.2016.07.013
- Irawan, C, Akbari, N, Jones, D & Menachof, D (2018), 'A combined supply chain optimisation model for the installation phase of offshore wind projects' International Journal of Production Research, Vol 56, No. 3, pp 1189-1207 https://doi.org/10.1080/00207543.2017.1403661
- Kim, S., Colicchia, C., and Menachof, D., (2018) "Ethical sourcing: An analysis of the literature and implications for future research" *Journal of Business Ethics*, Issue 152, pp 1033-1052. doi:10.1007/s10551-016-3266-8
- Menachof, D.,Grant, D.B. and Lalwani, C (2018) "Doing the right thing ethical issues in logistics and supply chain", International Journal of Logistics Research and Applications, 21:2, 113-114, DOI: 10.1080/13675567.2018.1433766

- Akbari, N, Irawan, C, Jones, D & Menachof, D, (2017) "The role of ports in the offshore wind industry" in "Port Management: Cases in Port Geography, Operations and Policy," edited by Stephen Pettit and Anthony Beresford. Kogan Page, EAN: 9780749474324
- Akbari, N, Irawan, C, Jones, D & Menachof, D (2017), 'A multi-criteria port suitability assessment for developments in the offshore wind industry' *Renewable Energy*, Vol 102, Part A, pp. 118-133. DOI: 10.1016/j.renene.2016.10.035
- Talas, R, Menachof, D and Harris, K (2017), "Supply Chain Risk and Vulnerability in Maritime Ports and Terminals" in Encyclopedia of Marine and Offshore Engineering, John Wiley and Sons
- Menachof, D., Grant, D.B., and Talas, R., (2016) "Does The Concept Of 'Nearporting' Provide a
   Pathway To Better Logistics Sustainability?" Journal of Supply Chain Management Research
   & Practice, Vol 10, No 1. pp.1-11

#### **Synergistic activities**

- Fulbright Scholarship, Odessa State University, Ukraine, 1994-1995
- Conference Chairman, 21<sup>st</sup> Annual Logistics Research Network Conference, Kingston upon Hull, England, September 2016. Major International Conference with 90 presentations and 186 authors from over 30 countries.
- Guest Editor, *International Journal of Logistics Research and Applications*, ISSN 1367-5567, Published by Taylor and Francis, 2018, Vol. 21, No. 2.
- Editorial Review Board, Journal of Business Logistics, ISSN:2158-1592, Published by Wiley
- Editorial Review Board, International Journal of Logistics Research and Applications, ISSN 1367-5567, Published by Taylor and Francis
- Editorial Review Board, International Journal of Logistics Management, ISSN 0957-4093
   Published by Emerald Group Publishing Ltd. through 2017
- Conference Co-Chairman, 2004 International Logistics Congress, Izmir, Turkey. Major International Conference with over 65 presentations and 200 delegates.
- United States Coast Guard Reserve, Petty Officer 3rd Class, Yeoman/Quartermaster, 1987-1994.

#### **External funding**

- LIUC-Università Cattaneo, Milan, Italy, Secured by Blockchain: Developing Cyber-Risk Free Supply Chains - €20,000 - Principal Investigator: Dallari Fabrizio – Awarded July 2019
- INNOVATE UK, Enhancing the End-to-End Journey Programme £ 2,946,356 total of which £524,713 to University of Hull - Awarded Feb 2016 - Collaborative and AdaPtive Integrated Transport Across Land and Sea (CAPITALS) - Co-Investigator
- INNOVATE UK, Enhancing the End-to-End Journey Programme £2,000,000 total of which £721,916.95 to University of Hull - Awarded Feb 2016 - LHOFT - Liverpool - Humber Optimisation of Freight Transport – Co-Investigator
- LEANWIND (Logistic Efficiencies And Naval architecture for Wind Installations with Novel Developments) SCP2-GA-2013-614020 is a 4-year project that started in December 2013. It is led by a 31-partner consortium and has been awarded €10 million by the European Commission's 7<sup>th</sup> Framework Programme. Co-Principal Investigator for Hull University.
- Chartered Institute of Logistics and Transport Seed-Corn Grant £6,500 November 2014 -Enhancing Cyber Resilience in Supply Chains (with A. Creazza and C. Coliccia)
- Technology Strategy Board £49,325 March 2014 Solutions for Integrated Seamless
   Transport Across Land and Sea (SISTALS) Principal Investigator for Hull University

### **Magno Queiroz**

Assistant Professor, Department of Information Technology and Operations Management (ITOM) at College of Business.

Research interests: IT-business alignment, IT-enabled agility, IT capabilities, IT resource sharing in multibusiness firms

# **Professional preparation**

University of Wollongong, Australia	MIS	PhD.	2014
Federal University of Campina Grande, Brazil	Computer Science	MS.	2010
Federal University of Campina Grande, Brazil	Computer Science	BSC.	2008

#### **Appointments**

since 2020	Assistant Professor, ITOM, Florida Atlantic University
2016-2020	Assistant Professor, School of Business, Utah State University
2015-2016	Lecturer, Systems, Management & Leadership, University of Technology Sydney
2014-2015	Research Fellow, Faculty of Business, University of Wollongong

### **Publications (10 samples from last 5 years):**

- Queiroz, M; Tallon, P; Coltman, T; Sharma, R; Reynolds, P. (2020) "Aligning the IT Portfolio with Business Strategy: Evidence for Complementarity of Corporate and Business Unit Alignment".
   Journal of Strategic Information Systems, Vol. 29, No. 3, pp. 1-15.
- Queiroz, M; Tallon, P; Coltman, T; Sharma, R (2020). "Digital Infrastructure, Business Unit Competitiveness, and Firm Performance Growth: The Moderating Effects of Business Unit IT Autonomy". Hawaii International Conference on System Sciences (HICSS), Maui. (Received Best Paper Award)
- Tallon, P; Queiroz, M; Coltman, T; Sharma, R. (2019) "Information Technology and the Search for Organizational Agility: A Systematic Review with Future Research Possibilities". *Journal of Strategic Information Systems*, Vol. 28, No. 2, pp. 218-237.
- Queiroz, M; Tallon, P; Sharma, R; Coltman, T. (2018) "The Role of IT Application Orchestration Capability in Improving Agility and Performance". *Journal of Strategic Information Systems*, Vol. 27, No. 1, pp. 4-21.
- Queiroz, M; Tallon, P; Coltman, T; Sharma, R (2018). "Corporate Knows Best (Maybe): The Impact of Global versus Local IT Capabilities on Business Unit Agility". Hawaii International Conference on System Sciences (HICSS), Waikoloa.
- Queiroz, M; Coltman, T; Tallon, P; Sharma, R; Reynolds, P. (2018). "The Complementarity of Corporate IT Alignment and Business Unit IT Alignment: An Analysis of Their Joint Effects on Business Unit Performance". Hawaii International Conference on System Sciences (HICSS), Waikoloa.
- Queiroz, M. (2017) "Mixed Results in Strategic IT Alignment Research: A Synthesis and Empirical Study". *European Journal of Information Systems*, Vol. 26, No. 1, pp. 21-36.

- Tallon, P; Queiroz, M; Coltman, T; Sharma, R. (2016) "Business Process and Information Technology Alignment: Conceptualization, Empirical Illustration, and Directions for Future Research". *Journal of the Association for Information Systems*, Vol. 17, No. 9, pp. 563-589.
- Reynolds, P; Coltman, T; Queiroz, M; Tallon, P. (2016). "Design Your Platform for Business Unit Agility and Performance". MIT Sloan School of Management, CISR Research Briefing, Vol. 16, No.2.
- Coltman, T; Tallon, P; Sharma, R; Queiroz, M. (2015). "Strategic IT Alignment: Twenty-five Years On". *Journal of Information Technology*, Vol. 30, No. 2, pp. 91-100.

- Guest Editor, European Journal of Information Systems
- Guest Editor, Journal of Information Technology
- Associate Editor, International Conferences on Information Systems (2017, 2018, 2020)
- Mini-track Chair, Americas Conference on Information Systems (2020)
- Reviewer for MISQ, ISR, EJIS, JSIS, JIT, and JBR.

# **Mary Schindlbeck**

Senior Instructor, Department of Information Technology and Operations Management (ITOM) at College of Business.

Research interests: quantitative literacy, instructional design, and cognitive load theory.

#### **Professional preparation**

Florida Atlantic University, Florida, USA	Educational Leadership	Ph.D.	2009
Florida Atlantic University, Florida, USA	Computer & Information Systems	M.A.S.	1987
Florida Atlantic University, Florida, USA	Computer & Information Systems	B.A.S.	1983

#### **Appointments**

2013	Senior Instructor, ITOM, Florida Atlantic University
1998 – 2013	Instructor, ITOM, Florida Atlantic University
1996 – 1998	Visiting Instructor, ITOM, Florida Atlantic University
1988 – 1996	Adjunct Instructor, ITOM, Florida Atlantic University

#### **Publications:**

 Bryan, V., Danaher-Schindlbeck, M., and Duay, D., Relationship Among Key Variables and Students' Perceptions Toward Learning Online in Postsecondary Environments. SITE 2005 Society for Information Technology & Teacher Education Conference, Phoenix, Arizona. March 2005.

#### **Presentations:**

- Schindlbeck, M. and Sweet, J. (2019). *Improving Student Engagement in Distance Learning Courses*, Teaching with Technology Showcase, March 23, 2019.
- Schindlbeck, M. and Sweet, J. (2016). *Teachnology: Teaching Technology Across the Curriculum,* Teaching with Technology Showcase, April 9, 2016.
- Schindlbeck, M. et al. (2012). Lecture Capture and Video Streaming (LCVS) Technology at the College of Business (panel presentation). FAU Faculty Seminar, November 9, 2012.
- Schindlbeck, M. (2012). *Technology in Political Campaigns*. FAU Living Learning Community Interest Session, October 3, 2012.
- Schindlbeck, M. (2011). *Does IT Matter?*. FAU Living Learning Community Interest Session, November 8, 2011.
- Root, A. and Schindlbeck, M. (2011). *Lecture Capture*. FAU Center for Teaching and Learning, Teaching with Technology Showcase, October 1, 2011.
- Chin, P. and Schindlbeck, M. (2010). *Comparing Learning Outcomes in Face-to-Face and Online Classes*. The Scholarship of Teaching Faculty Enhancement Program. November 18, 2010.

#### **Bharti Sharma**

Instructor, Department of Information Technology and Operations Management (ITOM) at College of Business.

Research interests: Business Analytics, Web Analytics, Descriptive Analytics, Data mining, Machine learning, Predictive Analytics.

# **Professional preparation**

Florida Atlantic University, Florida, USA	Electrical Engineering	Ph.D.	2014
University of Pune, India	Electrical Engineering	B.S.	1996

#### **Appointments**

2017	Full time Instructor, ITOM, Florida Atlantic University
2016-2017	Adjunct Professor, ITOM, Florida Atlantic University
2015-2016	Adjunct Professor, Nova Southeastern University
2015-2016	Adjunct Professor, Broward College
2015-2016	Post-doc Associate, University of Miami
2005-2011	Business Analyst, Florida Power & Light
1999-2005	Programmer, Florida Power & Light
1996-1998	Adjunct Professor, Delhi College of Engineering, India

#### **Publications:**

- Neelakanta, P.S. and B. Sharma, "Conceiving THz Endometrial Ablation: Feasibility, Requirements and Technical Challenges," IEEE Transactions on Terahertz Science and Technology, vol. 3, no. 4, pp. 402- 408, July 2013.
- Neelakanta, P.S. and B. Sharma, "Conceiving THz Endometrial Ablation: Feasibility, Requirements and Technical Challenges," IEEE Journal of Biomedical and Health Informatics, vol. 17, no. 4, pp. 813-819, July 2013.
- Neelakanta, P.S. and B. Sharma, "de Novo Radio Frequency Ablation Therapy: Application of Unexplored Electromagnetic Spectral Resources of mm-Wave/THz Band in Clinical Ablation Procedures- A Review," British Journal of Medicine & Medical Research, vol. 3, no. 4, pp.1701-1730, June 2013.
- Sharma, B. "Descriptive Analytics on the Endangered Species International Trade", Journal of Applied Business and Economics (JABE), vol. 22, no. 3, June 2020. https://doi.org/10.33423/jabe.v22i3.286.
- Sharma, B., K. Gant and A. Prasad, "Sensorimotor cortical activation in chronic motor-complete cervical spinal cord injury during EEG-Brain computer interface controlled functional electrical stimulation," Journal of Neuroscience, Clinical Neurophysiology (Under review)

#### • Refereed Conferences

- Sharma, B., "Endangered Species International Trade Analysis using Power BI Analytics Tool", 49th Annual Meeting of the Decision Sciences Institute, Chicago, IL, Nov 18-19, 2018, pp. 631-639.
- Sharma, B., K. Gant and A. Prasad, "Sensorimotor Cortical Activation during EEG-BCI controlled Functional Electrical Stimulation in Spinal Cord Injured Subjects," IEEE EMBC 2016 Conference Proceedings, Late-breaking research posters, Aug. 2016.
- Sharma, B., P. S. Neelakanta, V. Aalo, D. F. DeGroff, "Indoor RF-Channel Characterization of Nanothrough Femto-cell Ambient at Millimeter-wave/THz Frequencies in LTE Contexts," Proceedings of the 3rd IEEE International Conference on Recent Trends in Information Technology, July 2013, pp. 625-630. (Awarded Best Paper).

## **Jonathan Sweet**

Instructor and Program Director, Department of Information Technology and Operations Management (ITOM) at College of Business.

Research interests: Student course success, technology and adult learners, and operational efficiency

#### **Professional preparation**

Florida Atlantic University, Florida, USA	Educational Leadership	Ph.D.	2018
Florida Atlantic University, Florida, USA	Educational Leadership	M.Ed.	2016
Florida Atlantic University, Florida, USA	Operations Management	M.B.A	2013
Florida Atlantic University, Florida, USA	Management	B.B.A	2011

#### **Appointments**

2016	Instructor, ITOM, Florida Atlantic University
since 2016	Program Director, ITOM, Florida Atlantic University
2015-2016	Visiting Instructor, ITOM, Florida Atlantic University
2014-2015	Adjunct Instructor, ITOM, Florida Atlantic University
2014	Adjunct Instructor, College of Business & Management, Lynn University

#### **Presentations (Samples from last 5 years):**

- Sweet, J. et al. (2019). *Is your culture increasing your risk?* Securities Industry and Financial Markets Association's Internal Audit (SIFMA IA) Conference. Oct 30<sup>th</sup>, 2019.
- Sweet, J. & Schindlbeck, M. (2019). *Improving Student Course Engagement in Distance Learning Courses*. FAU Teaching with Technology Showcase. March 23<sup>rd</sup>, 2019.
- Sweet, J. (2018). *Predicting undergraduate student course success in a lecture capture quantitative methods course*. FAU Graduate Research Day. March 20<sup>th</sup>, 2018.
- Sweet, J. (2017). Predicting undergraduate student course success in a lecture capture quantitative methods course. International Society for Exploring Teaching and Learning Conference. October 13<sup>th</sup>, 2017.
- Sweet, J. (2017). Factors that predict undergraduate student course success in a lecture capture quantitative methods course. FAU Graduate Research Day. March 24<sup>th</sup>, 2017.
- Sweet, J. (2016). Factors that predict undergraduate student course success in a lecture capture quantitative methods course. Online Learning Consortium Accelerate Conference. November 17<sup>th</sup>, 2016.
- Schindlbeck, M., & Sweet, J. (2016). *Teachnology: Teaching technology across the curriculum*. FAU Teaching with Technology Showcase. April 9<sup>th</sup>, 2016.

#### Service

• Faculty Advisor, FAU MISA Student Organization, IT & OM Department, (Fall 2016 to Present)

#### **Professional Licenses/Certifications**

- Microsoft Office Specialist Certification: Excel 2016 Core (77-727)
- Florida Real Estate Sales Associate Professional Business License (License Number SL3304991)

#### **Chul Woo Yoo**

Associate Professor, Department of Information Technology and Operations Management (ITOM) at College of Business.

Information Security, Information Privacy, Business Analytics in Social Media, Electronic Word of Mouth Phenomena, Consumer Behaviors in Electronic Commerce, Information Systems in Agricultural Business

# **Professional preparation**

University at Buffalo, New York, USA	MIS	Ph.D.	2014
Seoul National University, South Korea	Economics	M.S.	2009
Seoul National University, South Korea	Applied Biology	B.S.	2006

### **Appointments**

2020-present Associate Professor, ITOM, Florida Atlantic University Assistant Professor, ITOM, Florida Atlantic University

# **Publications (10 samples):**

- Gaia, J., Wang, X., Yoo, C.W., Sanders, G.L., Good News and Bad News About Incentives to Violate the Health Insurance Portability and Accountability Act (HIPAA): Scenario-Based Questionnaire Study, JMIR Medical Informatics, 2020 (8:7), e15880.
- Yoo, C.W., Goo, J., Rao, H.R., Is Cybersecurity a Team Sport? A Multilevel Examination of Workgroup Information Security Effectiveness, MIS Quarterly -ABS4\*, 2020 (44:2), pp 907-931.
- Yoo, C.W., Huang, C.D., and Goo, J., Task Support of Electronic Patient Care Report (ePCR)
   Systems in Emergency Medical Services: An Elaboration Likelihood Model Lens, Information & Management ABS3, 2020 (57: 6), 103336.
- Yoo, C.W., An Exploration of the Role of Service Recovery in Negative Electronic Word-of-Mouth Management, Information Systems Frontier ABS3, 2020 (22), pp 719-734.
- Yoo, C.W., Sanders, G.L., and Cerveny, R.P., Exploring the influence of flow and psychological ownership on security education, training and awareness effectiveness and security compliance, Decision Support Systems ABS3, 2018 (109), pp 107-118
- Huang, C.D., Goo, J., Nam, K., and Yoo, C.W., Smart tourism technologies in travel planning: The role of exploration and exploitation, Information & Management – ABS3, 2017 (54:6), pp 757-770.
- Yoo, C.W., Goo, J., Huang, D.C., Nam, K., and Woo, M., Improving travel decision support satisfaction with smart tourism technologies: A framework of tourist elaboration likelihood and self-efficacy, Technological Forecasting & Social Change ABS3, 2017 (123), pp 330-341.
- Yoo, C.W., Srikanth, P., and Kishore, R., Knowing about your food from the farm to the table: Using information systems that reduce information asymmetry and health risks in retail context, Information & Management ABS3, 2015 (52:6), pp 692-709.
- Yoo, C.W., Kim, Y.J., and Sanders, G.L., The impact of interactivity of electronic word of mouth systems and E-Quality on decision support in the context of the e-marketplace, Information & Management – ABS3, 2015 (52:4), pp 496-505.
- Yoo, C.W., Sanders, G.L., Rhee, C., and Choe, Y., The effect of deterrence policy in software piracy: cross-cultural analysis between Korea and Vietnam, Information Development, 2014 (30:4), pp 342-357.

### **Courses taught at FAU**

- ISM4220 Business Data Communication (2014-2020)
- ISM4320 Information Systems Security (2014-2020)
- ISM4324 Digital Forensics (2021)
- ISM6225 Business Data Communication (2014-2020)
- ISM6328 Management Information Assurance Security (2018-2020)
- ISM6508 Web-based Business Development (2021)

- Coordinating Editor, Information Systems Frontier
- Associate Editor, International Journal of Information Management
- Associate Editor for the International Conferences on Information Systems (ICIS), 2019, 2020, 2021
- Mini-track co-chair for Americas Conference on Information Systems 2015, 2016 and 2017
   SIGHealth Healthcare Analytics.
- Mini-track co-chair for *Americas Conference on Information Systems* 2016, 2017, 2018, and 2019 SIGHCI\_IS, Food Industry and Consumer Behavior
- Program Committee Member for KrAIS Post-ICIS Workshop 2018, 2019, 2020, 2021
- Reviewers: DSS, ISF, EJIS, ISJ, IJIM, MISQ, I&M, ICIS, AMCIS, and ECIS.