



Item: AS: A-2d

Tuesday, February 1, 2022

**SUBJECT: APPROVAL OF FOR –CREDIT SELF-SUPPORTING PROGRAM
- CIP 30.7102**

PROPOSED BOARD ACTION

Approve the following For-Credit Self-Supporting Program:

- Master of Science with Major in Business Analytics (MSBA) (specialized track: Professional) (30.7102)

BACKGROUND INFORMATION

The College of Business ITOM is proposing to offer a working professional track the Master of Science in Business Analytics (MSBA) program as a self-supporting program administered by the Executive Education Department in the College of Business. The program track will be designed for working professional students and will be offered in formats that caters to working professionals. The program will train business graduate students in methods and tools to extract, curate, preserve, analyze, mine, visualize, and present structured and unstructured business data, in order to make well-informed executive decisions in various domain-specific business contexts. The emphasis of the program is Artificial Intelligence, Social Media Analytics, as well as more advanced domain-specific topics, such as Healthcare Analytics, Sports Analytics, Financial Analytics, and Hospitality and Marketing Analytics. There are no concentrations, tracks, or specializations. The program requires a minimum of 30 credits and does not offer a thesis option. Each course duration is 8 weeks and students are expected to take two courses simultaneously. The expected fast track completion time is 12 months.




IMPLEMENTATION PLAN/DATE

Effective Fall 2022, pending approval by the Florida Atlantic University Board of Trustees.

FISCAL IMPLICATIONS

This is a self-supporting version of an existing E&G degree and will not impact any existing E&G programs.

Supporting Documentation: Proposal for For-Credit Self-Supporting Program
Presented by: Dr. Bret Danilowicz, Vice President for Academic Affairs & Provost
Phone: 561-297-6350

 FLORIDA ATLANTIC UNIVERSITY	NEW/CHANGE PROGRAM REQUEST Graduate Programs	UGPC Approval _____ UFS Approval _____ Banner _____ Catalog _____
	Department College	
Program Name		Effective Date <small>(TERM & YEAR)</small>
		New Program* Change Program*
<p>Please explain the requested change(s) and offer rationale below or on an attachment.</p>		
<small>*All new programs and changes to existing programs must be accompanied by a catalog entry showing the new or proposed changes.</small>		
Faculty Contact/Email/Phone		Consult and list departments that may be affected by the change(s) and attach documentation
Approved by Department Chair <u></u> College Curriculum Chair <u></u> College Dean <u>Ken Johnson</u> UGPC Chair _____ UGC Chair _____ Graduate College Dean _____ UFS President _____ Provost _____		Date <u>09/23/2021</u> _____ 09/24/21 _____ 09/24/21 _____ _____ _____ _____ _____

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

FLORIDA ATLANTIC UNIVERSITY

Proposal for For-Credit Self-Supporting Program

This form must be completed and submitted to Continuing Education/Office of the Provost. New degrees, or an existing degree with a different curriculum tied to Self-Supporting delivery, must be approved through the normal faculty governance process.

College or Academic Unit: College of Business

Department/School of Academic Unit: Information Technology and Operations
Management (ITOM)

Name of Degree: Master of Science in Business Analytics (MSBA)

Specialized track (if applicable): Professional

CIP Code: 30.7102

Proposed Implementation Date: Fall 2022

1. Describe the operation and delivery format of the program. Include information of the uniqueness of the program, the target audience, and enrollment projections. Please provide information on data for enrollment projection.

The College of Business ITOM is proposing to offer a working professional track the Master of Science in Business Analytics (MSBA) program as a self-supporting program administered by the Executive Education Department in the College of Business. The program track will be designed for working professional students and will be offered in formats that caters to working professionals. The program will train business graduate students in methods and tools to extract, curate, preserve, analyze, mine, visualize, and present structured and unstructured business data, in order to make well-informed executive decisions in various domain-specific business contexts. The emphasis of the program is Artificial Intelligence, Social Media Analytics, as well as more advanced domain-specific topics, such as Healthcare Analytics, Sports Analytics, Financial Analytics, and Hospitality and Marketing Analytics. There are no concentrations, tracks, or specializations. The program requires a minimum of 30 credits and does not offer a thesis option. Each course duration is 8 weeks and students are expected to take two courses simultaneously. The expected fast track completion time is 12 months.

The program will provide graduates with business analytics skills and hands-on experiences that meet the market demand locally, in South Florida, as well as nationally and internationally. The

STEM emphasis, coupled with FAU’s location, means that it can take advantage of the large trade volumes to and from Latin America by providing an international/global focus to the program. As a STEM designated program, it allows enrolled graduates on student visas to extend their work stay in the United States up to two years longer, which provides an additional opportunity to recruit students.

Business Analytics is a key element of the financial, healthcare, cybersecurity, social media, marketing, trade, transport, retail, manufacturing, hospitality, sports management, and service industries. These are also key elements of the South Florida economy. The globalization and the advancements in digital technologies, with the most recent emphasis on Artificial Intelligence, have resulted in an increased focus on Business Analytics and its potentials for competitive advantage and business growth. Business Analytics is expanding in scope. There is an increasing demand for Business Analytics professionals locally and nationwide. The graduates of the MSBA program will fill needs in the local, state, and national level. Employment opportunities for the graduates include the job titles such as Management Analyst, Operations Research Analyst, Financial Analyst, Senior Business Analytics Manager, Assistant Director of Business Analytics, Artificial Intelligence Senior Manager, Chief Information Officer, Business Analyst, and others.

Year	Head Count	Credit Hours	FTE*
2022	20	600	18.75
2023	40	1200	37.5
2024	40	1200	37.5
2025	40	1200	37.5
2026	40	1200	37.5

Term Full-Time Equivalent enrollment (FTE) is based on FAU definition which divides credit hours by 32: https://www.fau.edu/iea/pdf/sasva/Data_Dictionary_10-29-2019.pdf

2. State the tuition for the program and explain the process used to determine the proposed self-supporting tuition rate. Include information on similar programs being offered elsewhere and their self-supporting tuition rates. Attach market analysis for proposed program, include assessment of need and projected workforce demand.

The tuition for the proposed MA in Business Analytics is the same for in-state and out-of-state students. This cost is based on competitive offerings across peer institutions and current SUS and FAU policies. The proposed cost per credit hour is \$900 per credit; thus students will complete 30 credit hours for \$27,000. See appendix A for budget details.

Current tuition for comparable professional programs, include

Institution Name	Public/Private	Degree	Credits / Length	Tuition Residents/Non-Residents
<u>University of Central Florida (UCF)</u>	Public	Professional MS in Management – Business Analytics Track	30 credits / 12 months	\$30,000/\$30,000
<u>University of South Florida (USF)</u>	Public	Executive Master of Science in Business Analytics and Information Systems	33 credits / 15 months	\$29,700/\$29,700
<u>Florida International University (FIU)</u>	Public	Master of Science in Health Informatics and Analytics (MSHIA)	39 credits / 15 months	\$27,500/\$30,000
<u>University of Miami (UM)</u>	Private	MS in Business Analytics	32 credits / 12 months	\$74,124/\$74,124

3. Provide a listing of the curriculum for the present E&G program and the curriculum for the proposed self-supporting program. Is the curriculum for both programs the same?

The curriculum is the same as the E&G Curriculum:

8 Required Courses (24 credits)

GEB 6217 Communication Strategies for Business Professionals (For working professional degree programs)

ISM 6026 Management Information Systems and Technology

ISM 6136 Data Mining and Predictive Analytics

ISM 6404 Introduction to Business Analytics and Big Data

ISM 6405 Advanced Business Analytics

ISM 6427 Business Innovation with Artificial Intelligence

ISM 6555 Social Media and Web Analytics

QMB 6303 Data Management and Analysis with Excel

Electives (6 credits)

QMB 6616 Supply Chain Analytics

ISM 6316 IT Project and Change Management

ISM 6942 Graduate Information Technology and Operations Management Internship

MAR 6816 Marketing Analysis and Executive Action

4. Discuss the impact of the program on existing FAU programs.

- a. **Explain how the unit will ensure that sufficient courses, paid through auxiliary funds are available to meet student demand and facilitate completion of each program submitted for consideration.**

The professional MS in Business Analytics program will be managed in a cohort format, which will ensure that a sufficient number of courses are prescheduled and available to meet student demand and facilitate completion of each program. The schedules of the programs are pre-set and the Department of Executive Education will work with College of Business Department Chairs, to ensure sufficient faculty staffing for all programs. Historically, degree programs offered to working professionals by FAU's Department of Executive Education have always provided a sufficient number of courses to meet student demand.

- b. **Will any similar E&G courses be eliminated or scaled back if this program is implemented.**

The current MS in Business Analytics program is non-cohort and it will not be eliminated or scaled back. The two programs will run side-by-side.

5. Will this program increase the state's fiscal liability or obligation? Will the self-supporting program cohort supplant or diminishing productivity of an existing E&G funded degree program in the same discipline?

This self-supporting program will not increase the state's fiscal liability or obligation. The Self-supporting program track cohort will not supplant or diminish the productivity an existing E&G funded degree program in the same discipline.

6. How will offering the proposed Self-Supporting program aligns with the mission of FAU (Race to Excellence 2015-2025). Outline how this program assists the University in achieving its performance metrics. Include information on assessment of need and projected workforce demand.

The professional MS in Business Analytics aligns with the University's mission of pursuing excellence in teaching and actively engaging with the community. Business analytics is recognized as part of a key platform in FAU's strategic plan, so that this program is aligned with the University's strategic direction. The self-supporting tuition programs also contributes to the University's strategic goal of enriching the educational experience by strengthening and expanding graduate programs at FAU, as well as meeting professional and workforce needs.

The increasing importance of information technology, information security and business analytics is relevant to many, if not all industry sectors, including healthcare, hospitality, marketing, finance, and supply chain management. Industry trends show strong demand for highly skilled individuals able to manage a wide range of information systems and processes, as well as analyze, interpret, and make sound business decisions based on this data. The degree program will assist the university in achieving its performance metric by graduating more students in STEM disciplines.

Workforce Demand:

Bureau of Labor Statistics (BLS) data:

According to the 2020 update by the Bureau of Labor Statistics (BLS) (2020), employment in business analytics-related occupations is projected to grow 5 percent from 2019 to 2029, faster than the average for all occupations, adding about 476,200 new jobs. “Globalization, a growing economy, and a complex tax and regulatory environment are expected to continue to lead to strong demand for accountants and auditors. In addition, increasing usage of data and market research in order to understand customers and product demand, and to evaluate marketing strategies, will lead to growing demand for market research analysts. Occupations with Business degrees with strong foundation in Business Analytics are Management analysts, Operations research analysts, Budget analysts, Market and Social Media Researchers, and others.

Hanover Market Research data:

Hanover Market research reports that demand for Masters’ level supply chain management professionals continues to grow in both the local and state market. These numbers at both the local and state level far exceed expected Masters’ level graduates from all SUS programs combined. The figures below show the South-East current and projected employment in Business Analytics-related occupations and top Business Analytics-related job titles (Hanover Research report).

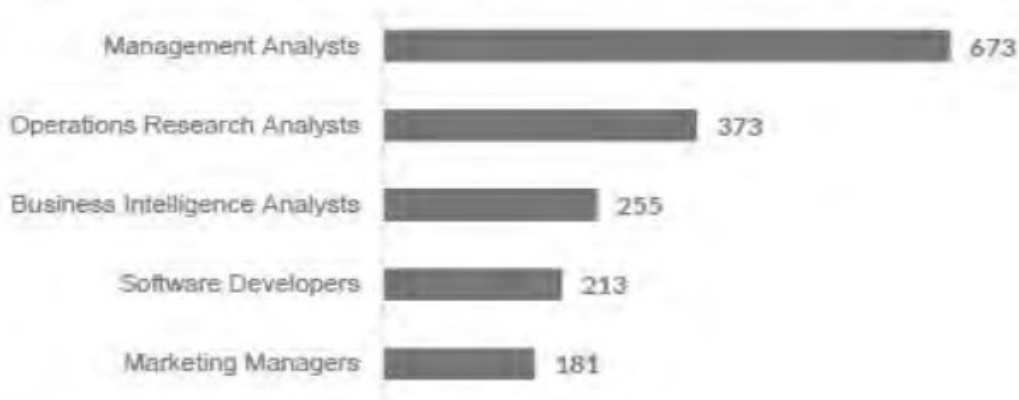
SOUTHEAST CURRENT AND PROJECTED EMPLOYMENT

Regional-related positions as of 2016 and 2026 (projected)



TOP BUSINESS ANALYTICS-RELATED JOB TITLES

Regional positions by job title that include the key phrase "business analytics" in the job description.



The proposed MS in Business Analytics degree is designed to allow working professionals in the region to continue working full-time while they pursue their degree. The MS in Business Analytics would be of immediate interest to employees and management of FPL, NextEra, and

JM Family Enterprises, who is in a partnership with the University to offer employees full tuition to attend courses online.

7. Identify any prerequisites or restrictions for acceptance into this program.

A Bachelor’s degree from a regionally accredited university is required for admission.

8. How will the unit monitor the quality and success of the self-supporting program? Provide specific metrics, evaluation methods, and frequency of evaluation.

- Number of students enrolled: The number of students enrolled each year will vary. Enrollment is a function of market demand and economic conditions, as well as a prospective student’s self-assessment of their time and availability to commit to a program.
- Number of students graduating: The program structure reinforces timely graduation rates. The number of students for each program during each calendar year will be evaluated.
- Student satisfaction: A satisfaction score will be reported for each course. The score will measure a composite of items including program content, pedagogical effectiveness of the professor, and administrative services provided to the student.

Department Chair/School Director

Date

Anita Pennathur

College Curriculum Committee

9/24/2021

Date

Ken Johnson

Dean

9/24/2021

Date

Executive Director COCE

Date

Senior Associate Provost

Date

University Curriculum Committee

Date

University Faculty Senate

Date

Chief Financial Officer

Date

Provost or Designee

Date

**APPENDIX A
BUDGET**

MS in Business Analytics - MSBA	Year 2022/2023	Year 2023/2024	Year 2024/2025	Year 2025/2026
Total Program Revenues	\$ 864,000	\$ 1,080,000	\$ 1,080,000	\$ 1,080,000
Total University Local Fees (\$68.11 per credit)	\$ 65,386	\$ 81,732	\$ 81,732	\$ 81,732
Total Total University Revenue Fee (5.5% in year 4)	\$ -	\$ -	\$ -	\$ 54,905
Total University Collected Revenues	\$ 65,386	\$ 81,732	\$ 81,732	\$ 136,637
Total Course Revenues College of Business	\$ 798,614	\$ 998,268	\$ 998,268	\$ 943,363
Total Direct Expenses	\$ (383,784)	\$ (479,794)	\$ (479,794)	\$ (479,794)
Indirect Administrative Expenses				
Dedicated Program Coordinator including S&B 0.75 FTE	\$ (55,275)	\$ (55,275)	\$ (55,275)	\$ (55,275)
Administration/Admission/IT/Fin Aid = .75 FTE at Coordinator Level	\$ (55,275)	\$ (55,275)	\$ (55,275)	\$ (55,275)
Total Indirect Administrative Expenses	\$ (110,550)	\$ (110,550)	\$ (110,550)	\$ (110,550)
Marketing Expenses				
Billboards per year	\$ (37,500)	\$ (18,750)	\$ (18,750)	\$ (18,750)
1 page in Catalog 2 x 350,000 - Design Print & Mail (Actual)	\$ (8,500)	\$ (8,500)	\$ (8,500)	\$ (8,500)
Digital Advertising (Search/Display/Social)	\$ (75,000)	\$ (75,000)	\$ (75,000)	\$ (75,000)
Total Marketing Expenses Before Indirect Expenditures & Overhead	\$ (121,000)	\$ (102,250)	\$ (102,250)	\$ (102,250)
Total Expenditures Before Indirect Expenditures & Overhead	\$ (615,334)	\$ (692,594)	\$ (692,594)	\$ (692,594)
Auxiliary Overhead Fee and Provost Fee from Expenditures	\$ (87,316)	\$ (98,279)	\$ (98,279)	\$ (98,279)
Result	\$ 95,965	\$ 207,395	\$ 207,395	\$ 152,491
We expect the College of Business to spend 80% of the yearly cash balance adding additional overhead revenues to the University.				
Budget Details:				
<u>¹Revenue and Local Fees:</u>				
- Local fees per credit for athletics (\$19.27), financial aid (\$15.18), activity & service (\$12.32), health (\$9.42), capital improvement (\$6.76), technology (\$5.16)				
- Gross revenue fee at 0% for the first three years, then 5.5% from year 4				
<u>²Direct Expenses:</u>				
- Faculty salary at \$12,000 per class plus FICA				
- Meals expense at \$20 per day per student				
- Books, materials, and software estimated at \$125.00 per credit				
- Parking at \$185.84 per year				
<u>³Indirect Expenses:</u>				
- Coordinator salary estimated at \$55,000 per year				
- Marketing may fluctuate according to recruiting efforts				
<u>⁴Aux Overhead and Provost Fees:</u>				
- Provost fee at 3% of expenditures				
- Auxiliary overhead fee at 11.19% of expenditures				