

# Letter of Notification (LON) Policy A1.0 New Academic Programs: Approval Process

**Institution:** Tennessee State University

**Proposed Academic Program:** Business Data Analytics, Master of Science (MSBDA)

Proposed Implementation Date: Fall 2024

CIP Code and Title: 30.7102

**CIP Code Definition:** Business Analytics

A program that prepares individuals to apply data science to solve business challenges. Includes instruction in machine learning, optimization methods, computer algorithms, probability and stochastic models, information economics, logistics, strategy, consumer behavior, marketing, and visual analytics.

**LON Submission Date:** July 18, 2023

**Posted Date on THEC Website:** July 18, 2023

**Public Comment Period:** July 19, 2023 – August 2, 2023

#### **New Academic Program Criteria for Review**

Per THEC Academic Policy 1.0 (Section 1.0.3A1) Criteria for Review, the following criteria are considered to maximize state resources in evaluating academic programs:

- Alignment with the state master plan for higher education and institutional mission
- Feasibility
- Institutional capacity to deliver the proposed academic program
- Program costs/revenues



### TENNESSEE STATE UNIVERSITY

3500 John A. Merritt Boulevard Nashville, Tennessee 37209-1561

OFFICE OF THE PRESIDENT

July 18, 2023

Dr. Robert Smith, Interim Executive Director Tennessee High Education Commission 4040 James Robertson Parkway, Suite 1900 Nashville, TN 37243

Dear Executive Director Smith:

On behalf of Tennessee State University, I respectfully submit the Letter of Notification (LON) for the proposed Master of Science in Business Data Analytics for your review. The Board of Trustees for Tennessee State University was notified of the proposed program at the June 15, 2023, board meeting. The Board approved the proposal and the LON submission to THEC.

This proposed program is in agreement with TSU's strategic plan to support the needs of the community and provide support for workforce development in Tennessee. The primary academic purpose of this professional degree program is to develop a professional workforce that is prepared to address the needs in the rapidly expanding data analytics field to make better business decisions. The students will be educated to work and excel in a variety of work settings to supply qualified workforce to an industry which is currently looking for cost effective ways of delivering more effective decision making based on diverse and heterogeneous data sets. Due to a critical shortage of professionals who can use advanced data analytics methods to translate unstructured data into valuable business insights, the graduates will be positioned to make an immediate impact in the workforce.

My administration is committed to supporting the Master of Science in Business Data Analytics. Please contact me if you require additional information. We appreciate your support of TSU's plans to include the program in the scope of academic programming.

Sincerely,

Glenda Glover President

Johanda Johover



# **LETTER OF NOTIFICATION (LON)**

# MASTER OF SCIENCE IN BUSINESS DATA ANALYTICS

### Submitted By:

Dr. Muhammed Miah, Interim Chair Department of Business Information Systems

**June 2023** 

#### **Section I: Overview**

#### **Program information**

Institution: Tennessee State University

Academic Program Name: Master of Science in Business Data Analytics (MSBDA)

Degree Designation: Master Degree Proposed CIP Code: 30.7102 CIP Code Title: Business Analytics

CIP Code Definition: A program that prepares individuals to apply data science to solve business challenges. Includes instruction in machine learning, optimization methods, computer algorithms, probability and stochastic models, information economics, logistics, strategy,

consumer behavior, marketing, and visual analytics.

#### **Academic Program Liaison (APL)**

Dr. Muhammed Miah Professor and Interim Chair Department of Business Information Systems College of Business Tennessee State University

Phone: 615-963-7015 Email: mmiah@tnstate.edu Dr. Charlise Anderson Managing Executive Director Institutional Effectiveness, Research, Planning and Assessment Tennessee State University Phone: (615)963-6471

Email: cander57@tnstate.edu

#### **Proposed Implementation Date**

Fall 2024

#### **Section II: Background**

#### **Background Concerning Academic Program Development**

Big data has become a major component in the world today. The need for workers capable of collecting, analyzing, and visualizing large amounts of information continues to grow exponentially. However, the production of such large datasets also requires understanding and having the proper tools to parse through them to uncover useful information for better decision making. Therefore, many data science and data analytics programs are being developed in academic institutions to better prepare the needed industry workforce. Hence, more companies rush to become data-driven in business, Big Data continues to play a pivotal role. According to a study by Markets and Markets, the data analytics market size is projected to grow from \$95.3 billion USD in 2021 to \$322.9 billion USD in 2026, a compound annual growth rate (CAGR) of 27.7%. <sup>1</sup>

Businesses across the world are looking for business data analysts preferably with a Master degree. Therefore, a Master of Science in Business Data Analytics (MSBDA) degree not only puts the graduates ahead of the competition, but it also provides the skills needed to successfully make effective business decisions. The Master of Science in Business Data Analytics program is

<sup>&</sup>lt;sup>1</sup> IT Business Edge (May 25, 2022). Top Big Data & Data Analytics Jobs in 2022, https://www.itbusinessedge.com/business-intelligence/big-data-and-data-analytics-jobs/

designed to give participants an understanding of how to look at data and identify insights, improve their ability to make long-term predictions, and prescribe future actions to help make better business decisions. With a curriculum focused on real-world applications, our one-year Master of Science in Business Data Analytics program will prepare the students to make data-driven decisions that move businesses and entire industries forward. Due to a critical shortage of professionals who can use advanced data analytics methods to translate unstructured data into valuable business insights, the graduates will be positioned to make an immediate impact in the workforce.

#### **Purpose and Nature of Academic Program**

The purpose of the proposed proposal aims to gain approval to offer the Master of Science in Business Data Analytics degree program. The Department of Business Information Systems proposes 30 credit hours Master degree to be completed Online in 12 months. The delivery method of this proposed degree program is fully online, and no in-person class attendance will be required. The primary academic purpose of this professional degree program is to develop a professional workforce that is prepared to address the needs in the rapidly expanding data analytics field to make better business decisions. The students will be educated to work and excel in a variety of work settings to supply qualified workforce to an industry which is currently looking for cost effective ways of delivering more effective decision making based on diverse and heterogeneous data sets.

The primary academic objectives for this proposed Master of Science in Business Data Analytics program are to develop high-level skills for graduates in:

- Identifying and solving problems as well as making decisions by appropriately analyzing data
- Acquiring, analyzing and exploring data
  - o Acquiring: getting, cleaning, archiving, integrating data
  - o Analyzing: visually, mathematically, statistically
  - o Exploring: seeking trends and patterns
- Managing and communicating data narratives (stories) that transform data into actionable information
- Exposure to real-world problems, through applied courses using various required data analytics tools

#### **Alignment with State Master Plan and Institutional Mission**

Tennessee higher education master plan focuses on three main sections: Student Success, Family Prosperity, and The Future Workforce<sup>2</sup>. Each of these three sections is divided into subsections, highlighting success stories across campuses and presenting actionable, measurable goals toward which the state and its institutions will work over the next 10 years. The subsections are organized as follows:

Student Success: Academic Readiness, Access to Higher Education, and Completion Family Prosperity: Affordability, Transparency, and Outreach to Adults

<sup>&</sup>lt;sup>2</sup> https://files.eric.ed.gov/fulltext/ED608937.pdf Last accessed on October 5, 2022

The Future Workforce: Future of Work, CTE and Work-Based Learning, and Academic Program Approval

The proposed Master of Science in Business Data Analytics program aligns with the state master plan as the program will prepare the students with the skills needed in the high demand technology field of big data and data analytics for their success not only to fill the workforce but also in their family and social life. The newly proposed program also aligns with TSU's mission as it will prepare a diverse group of competitive graduates focusing academic excellence through scholarly inquiry, teaching, research, lifelong learning, and public service. The graduates of the program will serve as the leaders in the global workforce and be an important component of global economy with a commitment to service and learning; that aligns with the mission of TSU College of Business.

#### **Institutional Capacity to Deliver the Proposed Academic Program**

The proposed Master of Science in Business Data Analytics program will be housed in the TSU Avon Williams (Downtown) Off-Campus Instructional Site. Educational facilities exist in the Avon Williams site are adequate to offer this program and will be utilized effectively. There is no Master of Science in Business Data Analytics program offered by a public or private institution serving the Nashville Metropolitan area. The proposed program will not be a threat to any existing program.

#### **Existing Programs Offered at Public and Private Tennessee Institutions**

Our proposed MSBDA program's Classification of Institutional Programs (CIP) Code is 30.7102. There are three master's programs offered by Tennessee higher education institutions that fall under the same CIP code category (30) which are as follows:

#### Middle Tennessee State University (MTSU): MS in Data Science (CIP Code 30.7001)

MTSU offers Master of Science in Data Science program under the College of Basic and Applied Sciences. The program is delivered on-ground with both online and in-person courses. The classes provide training on advanced data science skills including, but not limited to, computer programing, data visualization and manipulation, predictive modeling, analytics, and communications. Students may choose between a non-thesis option and a thesis option in the Master of Science in Data Science. The non-thesis option requires completion of 36 credit hours with a cumulative grade point average of 3.0 or above. The thesis option requires completion of 36-39 credit hours of course work with a grade point average of 3.0 or above, including enrollment of 3-6 credit hours thesis research in DATA 6640, and successful publication of a thesis with the graduate school.

#### Vanderbilt University (VU): Master of Science in Data Science (CIP Code 30.7001)

The Vanderbilt Master of Science in Data Science is an in person 4-semester, 16-course (48 credits) program, which includes the completion and presentation of a capstone project. Students will be trained in the three core sequences, gain practical experience, and sharpen workplace skills (teamwork, communication, leadership).

#### Tennessee State University (TSU): Master of Science in Data Science (CIP Code 30.7001)

TSU Master of Science in Data Science Program brings computer science, applied mathematics, and statistics together to prepare its graduates for seeking careers in data science. The MS in DS Program is designed to be fully online with optional on-campus immersion experiences. The program requires 30 credit hours to graduate. Upon completing the proposed program, students get the right blend of theory and practice of computer science and applied mathematics to draw insights and to extract information from large data.

The table below provides the graduation data per the National Center for Education Statistics (NCES)-Integrated Postsecondary Education Data System (IPEDS) for the above-mentioned existing programs with the CIP Code Classification 30.70 (Data Science) or 30.71 (Data Analytics) as shown in the table below.

CIP Code Classification 30.70 (Data Science) or 30.71 (Data Analytics)								
Institution	Grand total (C2021_ A First major Data Science Degrees	Grand total (C2021_ A First major Data Analytics Degrees	Grand total (C2021_ A Second major Data Science Degrees	Grand total (C2021_ A Second major Data Analytics Degrees	Grand total (C2020_ A_RV First major Data Science Degrees	Grand total (C2020_ A_RV First major Data Analytics Degrees	Grand total (C2020 _A_RV Second major Data Science Degrees	Grand total (C2020_ A_RV Second major Data Analytics Degrees
Name	total)	total)	total)	total)	total)	total)	total)	total)
Middle Tennessee State University	0	0	0	0	0	0	0	0
Tennessee State University	0	0	0	0	0	0	0	0
Vanderbilt University	0	0	0	0	0	0	0	0

The TSU's proposed MSBDA stands out as a truly unique program that distinguishes itself in the realm of higher education. Several factors contribute to its exceptional nature, setting it apart from other similar offerings.

First and foremost, the MSBDA program at TSU is designed to meet the growing demand for skilled professionals in the field of business data analytics. In today's data-driven world, the ability to extract meaningful insights from vast amounts of information is crucial for organizations to remain competitive. This program recognizes this need and aims to produce graduates who possess a deep understanding of data analytics techniques and their applications in a business context.

What makes this program particularly unique is its innovative approach to delivery. The MSBDA program is exclusively offered online, providing unparalleled flexibility and accessibility to students. By removing the constraints of physical classrooms and geographical limitations, Tennessee State University opens the doors of this program to individuals from diverse backgrounds and locations. This online format allows working professionals to pursue their

master's degree without compromising their current commitments, making it an ideal option for career advancement.

Furthermore, the MSBDA program's curriculum is carefully crafted to provide a comprehensive and multidisciplinary learning experience. It combines core business knowledge with advanced analytics techniques, ensuring that graduates are well-equipped to tackle real-world business challenges. The inclusion of three MBA courses focused on Management Information Systems (MIS) further enhances the program's breadth and depth, offering students a well-rounded education that encompasses both business fundamentals and specialized analytics skills.

Another notable aspect that sets the MSBDA program apart is its cohort-based model. Students enrolled in this program progress through their coursework as a group, fostering a sense of community and collaboration. This approach encourages peer-to-peer learning, allows for the exchange of ideas, and provides a supportive network of like-minded individuals. By experiencing the program together, students develop strong relationships, establishing valuable professional connections that can last beyond graduation.

The faculty members at TSU, specifically in the Business Information Systems (BIS) department, are not only accomplished experts in their respective fields but are also approved to teach graduate-level courses. Their expertise and dedication ensure that students receive a high-quality education and guidance throughout their academic journey.

The MSBDA program at Tennessee State University can be completed within a condensed timeframe of 12 months or one year. This expedited timeline enables students to gain advanced knowledge and skills efficiently, allowing them to enter the workforce sooner and capitalize on emerging career opportunities in the rapidly evolving field of data analytics.

Overall, TSU's proposed MSBDA program stands out as a distinctive and innovative offering. Its unique combination of online delivery, comprehensive curriculum, cohort-based model, renowned faculty, and accelerated timeline positions it as a program that prepares graduates to excel in the data-driven business landscape of today and tomorrow.

While the TSU Computer Science department offers a Master of Science in Data Science program, our proposed program will not impact it or programs in other local institutions. The fields of data science and data analytics are distinct disciplines, each with its unique characteristics and applications. Understanding the differences between these two programs is crucial in recognizing their individual contributions to the world of data. Data science is a multidisciplinary field that combines elements of mathematics, statistics, computer science, and domain knowledge to extract insights and make predictions from vast amounts of data. It focuses on the entire data lifecycle, from data acquisition and cleaning to analysis and visualization. Data scientists use advanced algorithms, machine learning, and statistical techniques to uncover patterns, build predictive models, and derive valuable insights from complex data sets. Their work extends beyond analyzing existing data; they also explore new methods of collecting and processing data to enhance decision-making processes. On the other hand, data analytics is a more specialized field that emphasizes the analysis and interpretation of data to guide business decisions and solve specific problems. Data analysts are proficient in utilizing various tools and techniques to uncover meaningful patterns and trends in data sets. They primarily work with existing data to extract actionable insights that help organizations understand their operations, customer behavior, market trends, and more. Data analytics focuses on answering specific business questions, identifying opportunities, and optimizing processes.

While both data science and data analytics involve working with data, they differ in terms of scope, skill sets, and objectives. Data science encompasses a broader range of techniques and methodologies, leveraging statistical analysis, machine learning, and programming skills to extract insights and build predictive models. It explores new ways of capturing and processing data to drive innovation and address complex problems. Data analytics, on the other hand, concentrates on analyzing existing data to derive actionable insights for business decision-making. It emphasizes data visualization, statistical analysis, and domain knowledge to provide meaningful reports and recommendations. Data analysts work closely with stakeholders to address specific challenges and provide targeted solutions based on data-driven findings.

Ultimately, the distinction lies in the breadth of knowledge and skills required. Data science entails a deeper understanding of mathematical modeling, algorithms, and programming languages, along with an ability to handle large and complex datasets. Data analytics focuses more on data visualization, statistical analysis, and business domain expertise to translate data into actionable insights.

#### Accreditation

The proposed program will be the part of the College of Business programs and is accredited both by The Southern Association of Colleges and Schools Commission on Colleges (SACSCOC) and Association to Advance Collegiate Schools of Business (AACSB International. The accreditation process for the proposed program will start after launching of the program.

#### **Administrative Structure**

Figure 1 provides the organizational chart for the Department of Business Information Systems in the College of Business. The proposed program will be housed in the Department of Business Information Systems and managed by the Department Head. The recruitment, advising, and marketing will be administered by the office of the Director of Graduate Studies, College of Business.

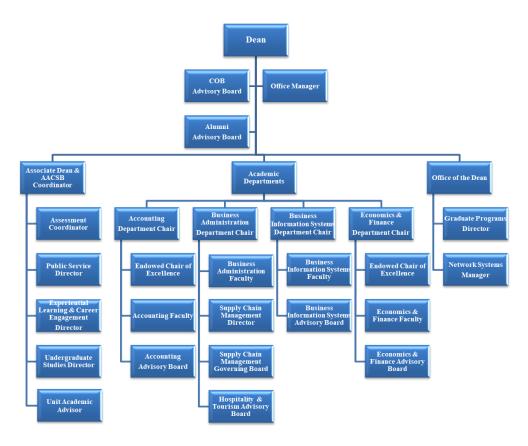


Figure 1. Organizational Chart

#### **Section III: Feasibility Study**

#### **Student Interest**

A survey was conducted during the Fall 2022 semester among the TSU College of Business current undergraduate students to explore the interests among them about the proposed program. Figure 2 displays the survey results.

Seventy (70) students responded to the survey. The students expressed very positive interests towards the proposed program. Question 1 asked whether the students believe that the proposed MSBDA degree would provide them with a better career opportunity. The survey result shows that 90% answered "Yes" to this question. Question 2 asked whether the students believe that the proposed MSBDA degree would provide them with a better earning potential, and 93% said "Yes". Question 3 asked whether the students believe that the proposed MSBDA degree with hands-on experience with real world data using various widely used tools in industry would provide them with the skills needed in the field. The survey result shows that 97% of the students said "Yes". Question 4 asked whether the students are interested, or will consider, pursuing the proposed MSBDA degree, and the result shows that 67% said "Yes, they will consider" whereas 33% said "No, they will not consider". We also requested the student contact information in Question 5 for further communication once the program launches. Overall, as mentioned earlier that the students showed a very strong positive interest for the proposed MSBDA program.

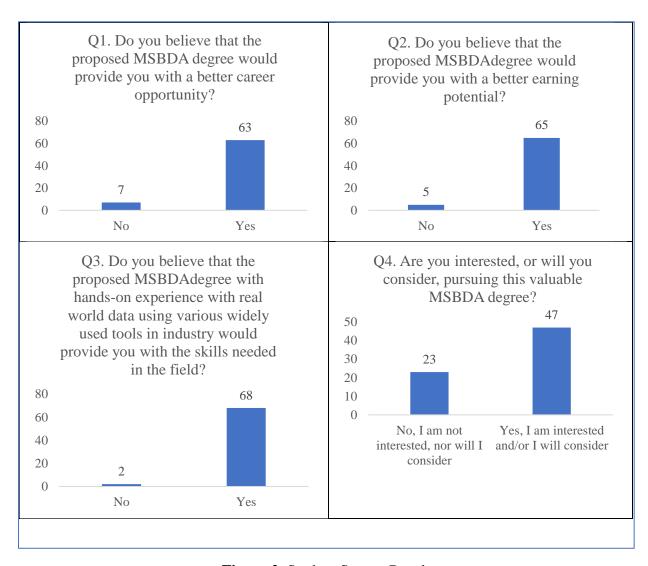


Figure 2. Student Survey Results

#### Local and Regional Need/Demand

Data analytics is a field ripe with opportunity, as companies across all industries have made big commitments to big data. The ability to gather, prepare, analyze and display data is one of the most sought-after skill sets across all industries. In TN, manufacturing, finance, real estate, and health care are among the core industries, and the state's economic growth is contingent on a strong and well-trained workforce in data analytics as companies rely on data to make informed business decisions.

According to the Bureau of Labor and Statistics, there are 230 Tennessee employees classified as Computer and Information Research Scientists. But, it's important to recognize that data analysts are only a portion of that number. A mere 5.5% of the workforce is in the data science/analysts

sector.<sup>3</sup> A Google Jobs search yields over 100 job postings for data scientists in Tennessee. While this will certainly ebb and flow over time, it's a good indication that the state's industries have recognized the value of data science expertise.

A 2018 Tennessean news article reported that Nashville was named the fastest-growing small-market tech talent pool in North America by commercial real estate firm CBRE. However, Nashville lacks the required tech workforce to compete with high-tech regions in the country, especially in Data Analytics. These tech roles are now one of the most sought-after disciplines in the employment market.<sup>4</sup>

Because data science/analytics is becoming essential in almost every type of business, the academic offerings in this discipline continues to grow.

#### **Employer Demand**

The Bureau of Labor and Statistics expects the number of hired Data Analysts to grow by 25% during the decade from 2020 to 2030<sup>5</sup>. This represents a much sharper increase than the average for other professions. During this decade, it is projected that there will be more than 10,000 openings for qualified Data Analysts.

Metropolitan cities are projected to be where most data analytics job openings will be in the next few years. Job prospects are expected to be quite good for qualified Data Analysts. Because many companies are still struggling to find qualified applicants to fill openings due to the talent shortage, job prospects are expected to continue to be strong in data analytics throughout the next decade.

This promising job outlook for data analysts is due to the increasing need for better market research across a range of different industries. By extracting, analyzing, and interpreting vast quantities of data, data analysts can obtain useful research insights that can influence market and business decisions.

Since the positions require specific analytical skills, they can be challenging to fill. Many companies leave jobs open until they find the right candidates, or they hire the best available people and train them on the job. The industries with the highest demand for data analysts include but not limited to Information Technology, Healthcare, Finance, Insurance, and Professional services.

The global market for data analytics was \$231.43 billion in 2021, and is expected to grow by a compound annual growth rate (CAGR) of 13.2% in the upcoming half a decade, reaching

<sup>&</sup>lt;sup>3</sup> Discover Data Science: Data Science Degree Programs in Tennessee,

https://www.discoverdatascience.org/states/tennessee/

<sup>&</sup>lt;sup>4</sup> The Tennessean: Are you a data scientist? Nashville needs you. https://www.tennessean.com/story/opinion/2018/11/17/nashville-data-scientist-jobs-available-taking-opinion/2012522002/

<sup>&</sup>lt;sup>5</sup> https://www.nobledesktop.com/careers/data-analyst/job-outlook

\$549.73 billion by the year 2028. North America is expected to keep leading the market, with the U.S. alone holding about 85% North America's data analytics market.<sup>6</sup>

We conducted an industry/corporate survey during the Fall 2022 semester to explore the interest of the organizations toward the proposed MSBDA program. Figure 3 displays the survey results. Question 1 first provided a brief general overview of the program skills (Business Data Analytics is focused on using the big data tools as implemented with data analysis to determine business decisions and implement practical changes within an organization. A business data analyst is tasked with collecting, processing and analyzing how available data can be used to explore important insights that can help businesses improve efficiency or solve problems.) and then asked whether the organization be interested in job candidates with those skills. The results show that 47% are extremely interested and 23% are somewhat interested. The results also show that 73% said the proposed program would benefit their employees. 73% answered that their organizations would be interest to enroll their employees in the proposed program as well. 43% said they have employee tuition reimbursement in place for Master degree and 23% said they don't have the reimbursement program in place at the moment but they are considering for future. We also see from the survey data that the survey respondents were from different industries including IT, Banking & Financial Services, Healthcare, Accounting, and so on. The respondents included from various positions such as Supervisor/Project Manager, Senior Level Executive (eg. President/CEO, Vice President), Middle Manager/Director, etc. 17% said they are affiliated with TSU in some way and 40% said are not affiliated with TSU.

Overall, we can see that the industry/corporate sector shows a very positive attitude towards the proposed MSBDA program.

 $^{6}\ https://www.datamation.com/careers/data-analytics-job-market/$ 

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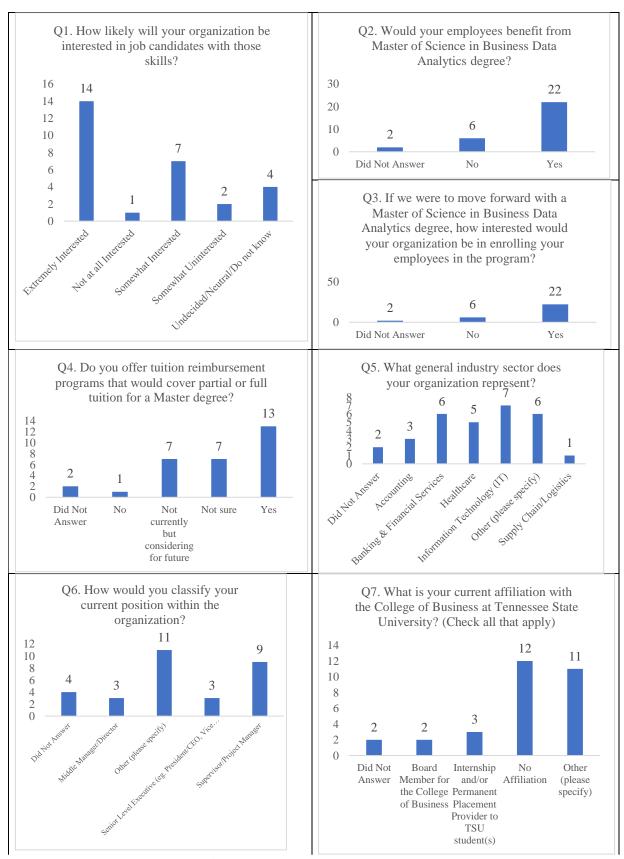


Figure 3. Industry/Corporate Survey

#### **Community and Industry Partnerships**

The BIS department has an Advisory Board comprising of people holding at least management positions from related industry. The board currently has 8 (eight) members. The board meets at least twice every semester with the BIS faculty. The advisory board helps the department in various aspects including but not limited to:

#### Curriculum

- Provide input relative to competencies required of successful graduates
- Review programs and identify needed modifications and improvements appropriate to ensure currency
- Identify employers/companies to complete program effectiveness evaluation forms
- Provide guidance in developing and implementing executive education programs for business leaders

#### Recruitment

• Assist in the recruiting of quality faculty, students, and resource persons to the Department

#### Promotion

• Serve as an ambassador and a voice for the department and promote externally a quality image of the department

#### **Operations**

- Provide input on the mission, goals, and strategic plan of the department
- Periodically meet with the faculty of the department to be informed and give input relative to advancing the department

#### **Financial**

- Stimulate fund raising at the board level
- Provide financial assistance (not required) to support the department programming and initiatives
- Assist in strengthening the financial resources of the department to support student scholarships, student professional enrichment activities, student trips to professional meetings and competitions, faculty research, faculty development and Department initiatives

#### Placement

 Assist students for internship placement and viable permanent employment opportunities for graduates

#### **Participation**

- Share personal experiences, professional expertise, and provide guidance on contemporaneous matters in the classroom
- Assist in identifying business and community leaders to serve on the Board of Advisors
- Play an active role in the department and COB Annual Awards Program, MBA events, and other professional and special events

#### Development

- Develop networking events for students with business leaders
- Suggest appropriate company field trips for BIS Students
- Help identify service projects for BIS students

Letters of support from workforce partners are provided in **Appendix A**.

#### **Section IV: Enrollment and Graduation Projections**

The projected enrollment, attrition, and graduates are shown in Table 1. We assume that in the first year twenty students will enroll in the program. We are also assuming a 10% increase in enrollment every year.

Table 1 – Projected Enrollments and Graduates Projected Enrollments and Graduates							
Year	Academic Year	Projected Total	Projected	Projected			
		Fall Enrollment	Attrition	Graduates			
1	2024-2025	20	1	19			
2	2025-2026	22	1	21			
3	2026-2027	24	1	23			
4	2027-2028	27	1	26			
5	2028-2029	30	1	29			

#### **Section V: Projected Costs to Deliver the Proposed Program**

The proposed program does not entail any additional costs for its delivery. It will be conducted entirely online, eliminating the need for physical resources such as classrooms, computer labs, and equipment. The current faculty, staff, and resources available are adequate to facilitate the program. The proposed curriculum includes three existing MBA courses for the concentration on Management Information Systems (MIS). These courses can be cross listed together for both programs. Additionally, the program operates on a cohort-based model. In the proposed MSBDA program, students must complete 30 credit hours in a specific order, progressing as a group. Each cohort will take the same courses together, one course at a time, with each course lasting four weeks. All regular faculty members in the BIS department are eligible and approved to teach graduate courses. Faculty teaching load will be assigned in combination of both undergraduate

and graduate courses. The current number of faculty members is sufficient to support the proposed graduate program. The THEC Financial Projections Form is provided in Appendix B.

#### **Faculty & Instructional Staff**

There is no new cost associated with current and anticipated faculty and instructional staff for the proposed program.

#### **Non-Instructional Staff**

There is no new cost associated with non-instructional staff.

#### **Graduate Assistants**

There is no new cost associated with current and anticipated graduate assistants.

#### Accreditation

There is no new cost associated with regional and/or programmatic accreditation.

#### **Consultants**

There is no need for consultants.

#### **Equipment**

There is no need for new equipment.

#### **Information technology**

There is no need for additional information technology acquisitions.

#### Library resources

There is no need for additional library acquisitions.

#### Marketing

There is no new cost associated with the marketing for the proposed program.

#### **Facilities**

There is no new cost associated with facilities.

#### **Travel**

There is no new cost associated with travel.

#### Other resources

There is no need for additional resources.

#### **Section VI: Projected Revenues for the Proposed Program**

#### **Tuition**

The program cost is \$15,990 for Tennessee residents and \$33,450 for non-Tennessee residents. Table 2 provides a breakdown of tuition costs and associated fees.

**Table 2.** Anticipated Tuition Revenue

Description	In-State Tuition	Out of State Tuition		
Cost Per Credit Hours	\$533	\$1,115		
Total Credit Hours	30	30		
Total Cost	\$15,990	\$33,450		

The program fee does not include the following:

- Books, professional subscriptions, and supplies
- Laptop computer and basic software such as Microsoft Office (If needed, students will be able purchase software at a discount through TSU)

Upon program acceptance, a non-refundable \$500 commitment deposit will be required to reserve a slot in the class and enroll in the program. This amount will be applied to the first tuition payment. Students will be responsible for any late payment fees/fines assessed by Tennessee State University.

#### **Grants**

There are no secured grants for the proposed program at this time.

#### Other

No other revenue to report at this time.



October 18, 2022

Muhammed Miah 330 10th Ave North, Room K-413 Nashville, TN 37203

> Re: Letter of Support for Tennessee State University's Master of Science in Business Data Analytics program

Dear Muhammed Miah,

By way of brief introduction, I'm Jill Thielmann, Director, US Academic Business Development at The Computing Technology Industry Association, Inc. (CompTIA) and an Advisory Board member of Tennessee State University (University).

CompTIA is a leading voice and advocate for the \$5 trillion global information technology ecosystem; and the estimated 75 million industry and tech professionals who design, implement, manage and safeguard the technology that powers the world's economy. Through education, training, certifications, philanthropy and market research, CompTIA promotes industry growth; the development of a highly-skilled workforce and a commitment to creating an environment where innovation happens and the opportunities and benefits made possible through technology are available to all.

In my capacity as an Advisory Board member at the University, I advise the school on how to incorporate CompTIA's learning materials and certifications into its courses and curriculum. CompTIA certifications are a vendor-neutral and considered the gold standard by many employers. The University's Master of Science in Business Data Analytics program includes courses and curriculum that prepares students for CompTIA's Data+ certification.

I am thrilled to be on Tennessee State University's Advisory Board as it aligns with CompTIA's mission to build a longer pipeline for tech talent to meet the industry's insatiable demand. Please do not hesitate to contact me at <a href="mailto:jthielmann@comptia.org">jthielmann@comptia.org</a> if you have any further questions.

Sincerely

Iil Thielmann

Director, US Academic Business Development

jthielmann@comptia.org

630-678-8334





#### Subject: Letter of Support for Master of Science in Business Data Analytics Program

Dear Dr. Muhammed Miah, PhD,

I hope this letter finds you in good health and high spirits. I am writing to express my enthusiastic support for the establishment of the Master of Science in Business Data Analytics program at Tennessee State University. As a Vice President of Operations with Ascension Together with Compassus, a leading post-acute healthcare company, I have witnessed the rapid growth and increasing importance of data analytics in the business landscape, particularly in the healthcare industry.

In today's digital era, data analytics plays a pivotal role in driving informed decision-making and fostering innovation across various sectors, including healthcare. The ability to collect, analyze, and interpret data has become a fundamental skillset for organizations seeking to gain a competitive edge and navigate the complex challenges of the modern business world. The demand for skilled data analysts and professionals who possess a deep understanding of business analytics techniques continues to grow exponentially.

Tennessee State University's initiative to launch the Master of Science in Business Data Analytics program aligns perfectly with the evolving needs of the industry and the future demands of healthcare company. These skills are precisely what the healthcare industry requires to extract valuable insights from vast amounts of data and drive transformative change in patient care, operational efficiency, and strategic planning.

By launching the Master of Science in Business Data Analytics program, Tennessee State University has demonstrated its commitment to preparing future leaders who will drive data-informed decision-making in the business world. This program will undoubtedly contribute to the growth of the analytics talent pool, not only in Nashville but also across the state of Tennessee, making it an attractive destination for businesses seeking data-driven professionals.

In conclusion, I wholeheartedly support the establishment of the Master of Science in Business Data Analytics program at Tennessee State University. The program's curriculum, focus on industry collaboration, and commitment to producing highly skilled graduates make it an excellent addition to the academic offerings in the field of data analytics. I have full confidence that the program will attract top-tier students and serve as a catalyst for innovation and growth in the healthcare industry.

Thank you for your dedication to advancing education and for considering my endorsement. I look forward to witnessing the program's success and the positive impact it will have on both students and the healthcare industry.

Yours sincerely,

Chad Ivie Vice President of Intake & Care Service Operations Ascension Together with Compassus

### **Appendix B: THEC Financial Projections Form**

Appendix B: THEC Financial Projections Form							
Institution Tennessee State University							
Program Name	Program Name Master of Science in Business Data Analytics (MSBDA)						
Projected One-Time Expenditures							
Category	Planning	Year 1	Year 2	Year 3	Year 4	Year 5	
Faculty & Instructional Staff	-	-	-	-	-	-	
Non-Instructional Staff	-	-	-	-	-	-	
Graduate Assistants	-	-	-	-	-	-	
Accreditation	-	-	-	-	-	-	
Consultants	-	-	-	-	-	-	
Equipment	-	-	-	-	-	-	
Information Technology	-	-	-	-	-	-	
Library resources	-	-	-	-	-	-	
Marketing	-	-	-	-	-	-	
Facilities	-	-	-	-	-	-	
Travel	-	-	-	-	-	-	
Other	-	-	-	-	-	-	
Total One-Time Expenditures	\$0	\$0	\$0	\$0	\$0	\$0	
	Projected	Recurring	Expenditur	es			
Category	Planning	Year 1	Year 2	Year 3	Year 4	Year 5	
Faculty & Instructional Staff	-	-	-	-	-	-	
Non-Instructional Staff	-	-	-	-	-	-	
Graduate Assistants	-	-	-	-	-	-	
Accreditation	-	-	-	-	-	-	
Consultants	-	-	-	-	-	-	
Equipment	-	-	-	-	-	-	
Information Technology	-	-	-	-	-	-	
Library	-	-	-	-	-	-	
Marketing	-	-	-	-	-	-	
Facilities	-	-	-	-	-	-	
Travel	-	-	-	-	-	-	
Other	-	-	-	-	-	-	
Total Recurring Expenditures	\$0	\$0	\$0	\$0	\$0	\$0	
Grand Total (One-Time and Recurring)	\$0	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	\$0	

Projected Revenue							
Category	Planning	Year 1	Year 2	Year 3	Year 4	Year 5	
Tuition	-	\$303,810	\$335,790	\$367,770	\$415,740	\$463,710	
Grants	-	-	1	1	1	1	
Other	-	-	-	-	-	-	
Total Revenues*	<b>\$0</b>	\$303,810	\$335,790	\$367,770	\$415,740	\$463,710	

<sup>\*</sup> The revenue calculations only consider in-state tuition. Students with out-of-state will provide more revenue.