



Office of the Provost and Vice President for Academic Affairs

MEMORANDUM

Date: July 27, 2020

To: Dr. James D. Fielder, Jr., Secretary of Higher Education
Maryland Higher Education Commission

From: Dr. Lesia Crumpton-Young
Provost and Senior Vice President for Academic Affairs
Morgan State University

RE: Morgan State University's Objection to Notre Dame of Maryland's New Academic Program
Proposal - Bachelor of Science in Actuarial Science

Please find attached Morgan State University's objection to the proposal from Notre Dame of Maryland to offer a Bachelor of Science degree program in Actuarial Science.

Thank you for your consideration of our response. If you need any additional information, please do not hesitate to contact me at lesia.young@morgan.edu or (443)885-3350.

c: Dr. David Wilson, President, Morgan State University
Dr. Farzad Moazzami, Interim Assistant Vice President for Academic Affairs, MSU
Dr. Hongtao Yu, Dean, School of Computer, Mathematical and Natural Sciences, MSU
Dr. Emily Dow, Assistant Secretary for Academic Affairs, Maryland Higher Education Commission

The School of Computer, Mathematical and Natural Sciences at Morgan State University objects to Notre Dame of Maryland University's (NDMU) proposed Bachelor of Science degree program in Actuarial Science. The strong objection is due to the duplication of programs in the State of Maryland.

Illustrated below is evidence of duplication of the Bachelor of Science degree program in Actuarial Science at Morgan State University.

2nd paragraph, 2nd sentence of NDMU's cover letter: The program uses a holistic admissions process to select a talented and diverse student body, thereby supporting the State's minority student achievement goals.

The selection and recruitment of students for NDMU's program includes targeting minority students, as indicated in their cover letter. This is duplication of Morgan's program, given that Morgan selects and recruits a large minority student population for their program. The table below shows the 2019-20 demographics of the students enrolled in the Actuarial Science program at MSU.

Race	Percentage
Black or African American	85%
Hispanic	5%
Arabic	10%

Page 1, last paragraph, line 6 of NDMU's proposal: There is the design of a 48-credit course of study. The curriculum will prepare students for the Introductory Financial Mathematics (FM) and Probability (P) exams and will satisfy the SOA Validation by Educational Experience (VEE) requirements.

This is a duplication of Morgan's curriculum to satisfy SOA requirements. Morgan also has a 48-credit course of study. (see curriculum below)

Requirements for The Actuarial Science Major 48 credits

- [ACSC 130 - Introduction to Actuarial Science](#) **2 Credits**
- [MATH 242 - Calculus II](#) **4 Credits**
- [MATH 243 - Calculus III](#) **4 Credits**
- [MATH 312 - Linear Algebra I](#) **3 Credits**
- [MATH 331 - Applied Probability and Statistics](#) **3 Credits**
- [MATH 333 - Applied Regression, Correlation, and Time Series Analysis](#) **3 Credits**
- [MATH 337 - Nonparametric Statistical Methods](#) **3 Credits**
- [MATH 340 - Introduction to Differential Equations](#) **3 Credits**
- [ACSC 346 - Financial Mathematics](#) **4 Credits**
- [MATH 363 - Actuarial and Stochastic Modeling I](#) **3 Credits**
- [MATH 364 - Actuarial and Stochastic Modeling II](#) **3 Credits**
- [MATH 431 - Mathematical Theory of Statistics I](#) **3 Credits**
- [MATH 432 - Mathematical Theory of Statistics II](#) **3 Credits**
- [ACSC 433 - Problem Solving Techniques and Applications in Probability](#) **2 Credits**

- [ACSC 105,106, 205, 206, 305, 306, 405, 406 - Professional Developments](#) **2 Credits**
- [MATH 450 - Senior Seminar](#) **3 Credits**
- **OR**
- [ACSC 490 - Actuarial Science Research](#) **3 Credits**
- **OR**
- [MATH 490 - Special Topics in Mathematics II](#) **3 Credits**

Page 2, 3- paragraph, line 7 of NDMU's proposal: Actuarial science will provide a clear career foundation of study for students interested in applied mathematics and finance/accounting in particular.

This is a duplication of Morgan's program. Since Actuarial Science is Morgan's foundation of study for students interested in applied mathematics and finance/accounting. Morgan's program promotes the development and use of statistics, probability, decision-making, and risk management techniques; and, it supports collaboration with, and integration of, other disciplines to produce theoretically sound and innovative practical applications in the advancement of the actuarial science discipline.

Page 2, 4- paragraph, line 1 of NDMU's proposal: Approximately 15 percent of the Women's College student body has declared majors aligned with quantitative (STEM) competencies and business; such interests should grow with the introduction of this major. Further, the enrollment statistics for fall 2019 indicate that 63 percent of the undergraduate Women's College population is a minority/ethnic.

This shows NDMU Women's College statistics course student population is minority/ethnic like Morgan's statistics course student population. Approximately 50% of Morgan's actuarial science majors are female and they are all minority students.

Page 3, 1- paragraph, line 2 of NDMU's proposal: Only two new 300-level courses must be developed (a 300-level statistics course and a 300-level financial mathematics course).

This is a duplication of Morgan's program via courses. These courses are already available at Morgan State University. (MATH 333 and MATH 346)

Page 4, 1- paragraph in section B.1., line 7 of NDMU's proposal: Graduates from NDMU's proposed Actuarial Science program will be ideally suited with a strong foundation of liberal arts and professional skills to advance the state of knowledge and the workforce in risk analysis.

This is a duplication of Morgan's program. Morgan has students entering the workforce in this area. Having another program in close proximity as at NDMU could potentially bring harm to Morgan's contribution to the workforce in the area of risk analysis. Positions of recent 2019-20 Morgan graduates:

- Robyn Demetrius (ACSC) - Morgan Stanley - Baltimore
- Alexis Samuels (ACSC) - J P Morgan Chase - Delaware
- Alexandria Hinds (ACSC) - Morgan Stanley - Baltimore
- Shane James (ACSC) - Morgan Stanley - Baltimore
- Sandra Bonga (ACSC) - Morgan Stanley - Baltimore
- Tyson Darby (ACSC) - Willis Towers Watson - Virginia
- Mustafa Abderrahman (ACSC) - Geico - Maryland

Bottom of page 4, last line of NDMU's proposal: NDMU's proposed Actuarial Science program will allow the University to create additional career pathways for its diverse student population.

NDMU's Women's College students are 38% 1st Generation, 63% minority, and 55% Pell eligible. According to data provided by the SOA, 62.6 percent of practicing actuaries are men, and only 22 percent are persons of color. Women who are first generation college attendees and women of color could be better represented in the actuary profession, and NDMU can assist in making progress in achieving such a worthy goal.

Morgan State University recruits a very similar student demographic. Having another program in such close proximity as at NDMU could potentially bring harm to Morgan's recruitment and enrollment of students. Approximately 90% of Morgan students are minority. Approximately 50% of Morgan students are Pell-eligible.

<https://www.morgan.edu/Documents/ADMINISTRATION/OFFICES/inst-research/Fall2019StudentDemographics.pdf>

Page 5, 2- paragraph in section 2 of NDMU's proposal: NDMU's proposed Actuarial Science program provides students access to an innovative opportunity to enroll in and earn an in-demand degree that will support their advancement in a variety of industries.

This is a duplication of Morgan's program. Access to this in-demand degree is already provided at Morgan State University via their BS degree. Having another program in such close proximity could potentially bring harm to Morgan's student access to this in-demand degree offered at Morgan. Over the last five years, there have been an average of five earned actuary degrees at Morgan: 2015 – 2, 2016 – 6, 2017 – 9, 2018 – 1, 2019 – 7. Because of program duplication, these degrees will be at risk of disappearing.

Page 5, 1- paragraph in section C of NDMU's proposal: While no particular major is required to qualify to take the examinations to become an associate of the Society of Actuaries, graduates of NDMU's actuarial science baccalaureate program will have completed requirements related to business, statistics, and computer science that will not only prepare them for certification exams but also for securing sought after entry-level positions.

This is a duplication of Morgan's program via completed requirements related to business, statistics, and computer science that prepare students for certification exams and entry-level positions. These are the same workforce requirements of Morgan State University actuarial science majors. Having another program in such close proximity as at NDMU could potentially harm Morgan's impact on entry level jobs in actuarial science related areas. Most of Morgan's students receive entry level jobs upon graduation and rarely enter a graduate program. See the previous listed 2019-20 Actuarial Science program graduates.

Page 6, next to the last line of NDMU's proposal: Maryland currently has three colleges or universities approved to offer actuary related programs. MHEC approved programs are Morgan and McDaniel College, and a concentration at Towson University. Adding another actuary baccalaureate program in the state of Maryland, could potentially bring harm to Morgan's program since NDUM is located in Baltimore City. The universities are only 2.6, miles apart, which is about a 10-minute drive.

Page 8, 3- paragraph in section D.1. of NDMU's proposal: Notre Dame is intentionally offering this degree as a bachelor of arts to retain the liberal art character of the degree-which will include course offerings such as Teamwork and Negotiation, Women in Leadership, Business Ethics, and languages. Due to the professional nature of the actuary profession, this difference in programs is not strong enough to justify approval of NDMU's program. This is a duplication of Morgan's program given the fact that Morgan also offers courses in Teamwork and Negotiation (BUAD 202), Leadership (BUAD 202), and languages (Morgan offers many foreign language courses.)

Page 8, next to the last line of paragraph in section E.1. of NDMU's proposal: The modest number of students projected for the major should not negatively impact HBIs.

There is no evidence presented in NDMU's proposal to support NDMU's claim that modest numbers of students projected for their program should not negatively impact HBI's. NDMU should be required to provide proof to MHEC of this claim. Having another actuarial baccalaureate program in the state of Maryland even with a modest number of projected students could potentially harm Morgan's program since the institutions are located in close proximity in Baltimore City. The universities are approximately 2.6 miles apart. Mentioned in NDMU's proposal is that the proposed program is aimed at diverse student populations involving first generation women, minorities, and Pell eligible students on their campus. Thus, NDMU will be competing with Morgan's established program for this diverse student population. In addition, NDMU will also be competing with McDaniel's College who was recently approved for an actuarial science degree program aimed at minority students.

Page 8, line in section F.1. of NDMU's proposal: NDMU does not believe this program will impact the unique mission and identities of HBIs. There is no evidence presented in NDMU's proposal to support NDMU's belief that their proposed program, if approved, will not impact Morgan's mission and identity. **Morgan's Actuarial Science Program** seeks to increase the number of highly qualified students, especially among underrepresented populations, entering careers in actuarial and actuarial-related fields who can significantly contribute to the financial security of all entities through their ability to identify, assess, manage and quantify uncertainty and risk. The program promotes the development and use of statistics, probability, decision-making and risk management techniques; and, it supports collaboration with, and integration of, other disciplines to produce theoretically sound and innovative practical applications in the advancement of the actuarial science discipline.

See https://www.morgan.edu/about/mission_and_vision.html for Morgan's mission.

Page 9, in section 2, Learning Outcomes of NDMU's proposal: See learning outcomes mentioned.

This is a duplication of Morgan's program given the fact that Morgan has the same learning outcomes. The educational objectives of the Morgan State Actuarial Science Program are to:

1. Prepare students for Society of Actuaries (SOA) and Casualty Actuarial Society (CAS) professional examinations
2. Have students complete all required Validation by Educational Experience (VEE) courses required by the SOA prior to graduation
3. Assist students in acquiring the oral, written, networking, and other soft skills necessary for success in the actuarial profession

Expected student learning outcomes are as follows. Students will:

1. Sit for at least one of the SOA professional exam prior to graduation
2. Complete all Validation by Educational Experience (VEE) requirements for Applied Statistical Methods, Corporate Finance and Economics
3. Master the fundamental concepts associated with the insurance and financial industry
4. Develop critical and analytical thinking skills required to conduct research on a topic of insurance or actuarial interest
5. Develop oral, written, networking, and other soft skills necessary for success in the actuarial profession.

Page 10, Proposed Curriculum (see attached curriculum course sequence).

