Proposal for a New Degree Program

I. Information and Rationale

A. Primary Contact Information

Institution: **Auburn University**

Contact: **Dr. Mark DeGoti**

Title: **SACSCOC Liaison**

Email: **markdegoti@auburn.edu**

Telephone: **334-844-6847**

B. Program Information

Date of Proposal Submission: **11/1/2024**

Award Level: **Doc Research (IPEDS 17)**

Award Nomenclature (e.g., BS, MBA): **PhD**

Field of Study/Program Title: **Statistics and Data Science/ PhD in Statistics and Data Science**

CIP Code (6-digit): **30.7001 (Data Science, General)**

C. Administration of the Program

Name of Dean and College: **Dr. Edward Thomas Jr, College of Sciences and Mathematics (COSAM)**

Name of Department/Division: **Mathematics and Statistics**

Name of Chairperson: **Dr. Ash Abebe**

D. Implementation Information

Proposed Program Implementation Date: **8/1/2025**

Anticipated Date of Approval from Institutional Governing Board: **9/6/2024**

Anticipated Date of ACHE Meeting to Vote on Proposal: **3/12/2025**

SACSCOC Sub Change Requirement (Notification, Approval, or NA): **NA**

Other Considerations for Timing and Approval (e.g., upcoming SACSCOC review): **NA**

E. Concise Program Description

The PhD in Statistics and Data Science at Auburn University is designed to develop students' expertise in statistical theory, computational methods, and data analysis. The program provides advanced training in areas such as machine learning, big data analytics, and statistical modeling. Graduates will be equipped to pursue research and teaching careers in academia, as well as advanced positions in industry and government. The program emphasizes hands-on research experience and interdisciplinary

collaboration, preparing graduates to meet the growing demand for professionals in statistics and data science.

F. Specific Rationale (Strengths) for the Program

List 3 – 5 strengths of the proposed program as specific rationale for recommending approval of this proposal.

1. **Interdisciplinary and Cutting-Edge Research: The PhD program is designed to provide students with the skills to develop novel statistical models and advanced data science techniques, preparing them to solve real-world problems in various industries, including healthcare, technology, and finance.**
2. **Growing Industry Demand: As more organizations rely on data-driven decision-making, the demand for professionals trained at a high-level is increasing. This program is well-positioned to meet that demand.**
3. **Faculty Expertise: Auburn University's exceptional and engaged faculty bring a wealth of knowledge and research experience to the program, ensuring that students receive top-tier education and mentorship.**
4. **Alignment with Auburn's Strategic Goals: The program supports Auburn University's mission of advancing research excellence, innovation, diversity, and industry engagement, while also contributing to the broader economic development of the state and region.**

List external entities (more may be added) that may have supplied letters of support attesting to the program's strengths and attach letters with the proposal at the end of this document.

1. [Insert Text]
2. [Insert Text]
3. [Insert Text]

II. Background with Context

A. Student Learning Outcomes

List four (4) to seven (7) of the student learning outcomes of the program.

1. **Advanced Knowledge in Statistical Theory and Methods: Students will apply advanced statistical theories and methods, including probability theory, statistical inference, and modeling, demonstrating a deep understanding through successful completion of exams, projects, and comprehensive preliminary exams specific to statistical theory and methods.**
2. **Proficiency in Statistical Computing and Data Science Tools: Students will effectively utilize statistical computing tools such as R, Python, and other programming languages to analyze complex data sets and implement statistical models, as measured by lab assignments, project-based assessments, and practical exams.**

3. **Application of Statistical Methods to Real-World Problems: Students will apply advanced statistical techniques to solve practical problems in fields such as business, health sciences, and engineering, with performance assessed through collaborative publications, capstone projects, performance in the required statistical consulting practicum course, and other real-world problem-solving tasks.**
4. **Independent Research and Scholarly Contributions in Statistics and Data Science: Students will conduct independent research specifically in statistics and data science, contributing original findings to the scholarly community and submitting their research for publication in peer-reviewed journals. Research progress and contributions will be evaluated through dissertation reviews and publication submissions.**
5. **Effective Communication of Statistical Results: Students will communicate statistical findings effectively through oral, written, and visual formats, with an emphasis on presenting results to specialized and general audiences. This outcome will be assessed through conference and seminar presentations, written reports, and the use of visual data representations.**
6. **Collaboration and Interdisciplinary Research Skills: Students will engage in collaborative, interdisciplinary research efforts, developing statistical models tailored to specific applications in diverse fields. Collaboration and interdisciplinary competency will be measured through team-based projects, peer evaluations, and interdisciplinary research presentations and publications.**

B. Similar Programs at Other Alabama Public Institutions

List programs at other Alabama public institutions of the same degree level and the same (or similar) CIP codes. If no similar programs exist within Alabama, list similar programs offered within the 16 SREB states. If the proposed program duplicates, closely resembles, or is similar to any other offerings in the state, provide justification for any potential duplication.

CIP Code	Degree Title	Institution with Similar Program	Justification for Duplication
27.0601	**PhD: Applied Statistics**	**University of Alabama**	The PhD in Applied Statistics at the University of Alabama, within the Department of Information Systems, Statistics, and Management Science, focuses on statistical applications in business, information systems, and management science. In contrast, Auburn's PhD in Statistics and Data Science offers a broader scope, applying data science methods like machine learning and big data analysis across fields such as environmental science, engineering, and social sciences, preparing students for diverse roles beyond business-centric applications
26.1102	**PhD: Biostatistics**	**University of Alabama at Birmingham**	UAB's PhD in Biostatistics is situated within the health and biomedical sciences, focusing on statistical methods for biomedical research. Auburn's PhD in Statistics and Data Science program distinguishes itself through its interdisciplinary application across various domains beyond healthcare, including engineering, environmental studies, and social

			sciences, and integrates advanced data science methodologies.

C. Relationship to Existing Programs within the Institution

1. Is the proposed program associated with any existing offerings within the institution, including options within current degree programs? **Yes ☐ No ☒**

   (Note: Most new programs have some relationship to existing offerings, *e.g.*, through shared courses or resources). If yes, complete the following table. If this is a graduate program, list any existing undergraduate programs which are directly or indirectly related. If this is a doctoral program, also list related master's programs.

Related Degree Program Level	Related Degree Program Title	Explanation of the Relationship Between the Programs

2. Will this program replace any existing programs or specializations, options, or concentrations? **Yes ☐ No ☒**

   If yes, please explain.

3. Will the program compete with any current internal offerings? **Yes ☐ No ☒**

   If yes, please explain.

D. Collaboration

Have collaborations with other institutions or external entities been explored? **Yes ☐ No ☒**

If yes, provide a brief explanation indicating those collaboration plan(s) for the proposed program.

Have any collaborations within your institution been explored? **Yes ☐ No ☒**

If yes, provide a brief explanation indicating those collaboration plan(s) for the proposed program.

E. Specialized Accreditation

1. Will this program have any external accreditation requirements in addition **Yes ☐ No ☒**

to the institution's SACSCOC program requirements?

If yes, list the name(s) of the specialized accrediting organization(s) and the anticipated timeframe of the application process.

2. Does your institution intend to pursue any other non-required accrediting organizations for the program?* **Yes ☐ No ☒**

   If yes, list the name(s) of the organization(s) and the purpose of the pursuit.

   If there are plans to pursue non-required external accreditation at a later date, list the name(s) and why the institution is not pursuing them at this time.

   Note: Check *No* to indicate that non-required external accreditation will not be pursued, which requires no explanation.

F. Professional Licensure/Certification

Please explain if professional licensure or industry certification is required for graduates of the proposed program to gain entry-level employment in the occupations selected. Be sure to note which organization(s) grants licensure or certification.

N/A

G. Additional Education/Training

Please explain whether further education/training is required for graduates of the proposed program to gain entry-level employment in the occupations selected.

N/A

H. Admissions

Will this program have any additional admissions requirements beyond the institution's standard admissions process/policies for this degree level? **Yes ☒ No ☐**

If yes, describe any other special admissions or curricular requirements, including any prior education or work experience required for acceptance into the program.

Admission to the Ph.D. program in Statistics and Data Science at Auburn University is competitive. Applicants must meet the following minimum requirements:

- **A bachelor's or master's degree in a relevant field (e.g., statistics, mathematics, computer science) with a GPA of 3.0 or higher.**
- **GRE scores are recommended but not required.**
- **Three letters of recommendation.**
- **A statement of purpose outlining research interests and career goals.**

Admission is based on a holistic review, considering academic achievement, research experience, and potential for success. Students must maintain a GPA of 3.0 and pass two qualifying exams in statistical theory and methods by the end of their second year in the program. Regular meetings with an advisor to track research progress are

required. The program's requirements are designed to prepare students for its rigor and ensure high standards of success.

I. Mode of Delivery

Provide the planned delivery format(s) (*i.e.*, in-person, online, hybrid) of the program as defined in policy along with the planned location(s) at which the program will be delivered (*i.e.*, on-campus and/or at specific off-campus instructional site(s)). Please also note whether any program requirements can be completed through competency-based assessment.

The PhD in Statistics and Data Science program will be delivered in-person, with all coursework and program activities taking place on-campus at Auburn University, where the Department of Mathematics and Statistics is housed. The program will not include any competency-based assessments at this time.

J. Projected Program Demand (Student Demand)

Briefly describe the primary method(s) used to determine the level of student demand for this program using evidence, such as enrollments in related coursework at the institution, or a survey of student interest conducted (indicate the survey instrument used), number and percentage of respondents, and summary of results.

The demand for the PhD in Statistics and Data Science is supported by historical enrollment trends and successful placement of graduates from the PhD in Mathematics with a Statistics concentration. To date, at least thirty students have graduated with education and research focused in Statistics, many of whom have secured positions as data scientists at major companies like Google and Amazon, statisticians at Bayer and AbbVie, and tenure-track faculty at institutions such as Ohio State University and the US Naval Academy.

Currently, the program enrolls 30 students with Statistics concentration, with an anticipated enrollment of 5-7 students in Fall 2025. We project this number to grow to 10-14 by Fall 2028. At this enrollment level, we expect an average of 3-4 graduates per year, demonstrating consistent interest and demand for advanced education in statistics and data science.

K. Standard Occupational Code System

Using the federal Standard Occupational Code (SOC) System, indicate the top three occupational codes related to post-graduation employment from the program. A full list of SOCs can be found at https://www.onetcodeconnector.org/find/family/title#17.

A list of Alabama's In-Demand Occupations is available at https://www.ache.edu/index.php/policy-guidance/.

SOC 1 (**required**): 15-2041.00 — **Statisticians-**
Statisticians develop and apply statistical theory and methods to collect, analyze, and interpret quantitative data. This role aligns well with graduates from this PhD program who enter both academia and industry, especially in fields like healthcare, pharmaceuticals, and finance.

SOC 2 (optional): 15-2051.00 — **Data Scientists and Mathematical Science Occupations, All Other**
Data scientists apply statistical analysis, machine learning, and computational methods to make sense of large data sets. This code captures graduates who work in data science roles across various sectors, including technology companies like Southern Power, Google and Amazon.

SOC 3 (optional): -

Briefly describe how the program fulfills a specific industry or employment need for the

State of Alabama. As appropriate, discuss alignment with Alabama's Statewide or Regional Lists of In-Demand Occupations (https://www.ache.edu/index.php/policy-guidance/) or with emerging industries as identified by Innovate Alabama or the Economic Development Partnership of Alabama (EDPA).

The PhD in Statistics and Data Science fulfills critical employment needs in Alabama and beyond by preparing graduates for high-demand roles in data analysis, statistical modeling, and research. This aligns with Alabama's *Statewide In-Demand Occupations*, particularly in emerging industries identified by *Innovate Alabama* and the *Economic Development Partnership of Alabama (EDPA*), such as healthcare, biotechnology, and technology sectors. The program supports economic growth by equipping professionals with the advanced skills needed to drive data-driven decision-making and innovation across industries.

III. Curriculum Information for Proposed Degree Program

A. Program Completion Requirements: Enter the credit hour value for all applicable components (enter N/A if not applicable).

Curriculum Overview of Proposed Program	
Credit hours required in **general education**	N/A
Credit hours required in **program courses**	38
Credit hours in **program electives/concentrations/tracks**	N/A
Credit hours in **free electives**	12
Credit hours in **required research/thesis**	10
Total Credit Hours Required for Completion	**60**

Note: The above credit hours **MUST** match the credit hours in the *Curriculum Components of Proposed Program* table in Section V.G.

B. Maximum number of credits that can be transferred in from another institution and applied to the program:

Transfer credits are allowed in accordance with Auburn University's graduate-level transfer credit policies. According to this policy, the total number of credit hours that may be transferred from another accredited institution may be no more than 50% of the total credit hours for the program. So, a maximum of 30 credit hours may be transferred so long as 1) it falls within the time limits of the degree and 2) is approved by the advisory committee and the Dean of the Graduate School.

C. Intended program duration in semesters for full-time students:

The intended duration for full-time students is 8 semesters (approximately 4 years), depending on the student's progress and completion of the dissertation.

D. Intended program duration in semesters for part-time students:

The intended duration for part-time students is 12-14 semesters (approximately 6-7 years), depending on their course load and progress.

E. Does the program require students to demonstrate industry-validated skills, specifically through an embedded industry-recognized certification, structured work-based learning with an employer partner, or alignment with nationally recognized industry standards? **Yes ☐ No ☒**

If yes, explain how these components fit with the required coursework.

F. Does the program include any concentrations? **Yes ☐ No ☒**

If yes, provide an overview and identify these courses in the *Electives/Concentrations/Tracks* section in the Curriculum Components of Proposed Program Table in Section V.G.

G. Please provide all course information as indicated in the following table. Indicate new courses with "Y" in the associated column. If the course includes a required work-based learning component, such as an internship or practicum course, please indicate with a "Y" in the WBL column.

Program Name:	**Statistics and Data Science**			
Program Level:	**Doctorate (PhD)**			
Curriculum Components of Proposed Program				
Course Number	**Course Title**	**Credit Hours**	**New? (Y)**	**WBL? (Y)**
General Education Courses *(Undergraduate Only)*				
Program Courses				
STAT7600	**Statistical Theory and Methods I- Core I course**	3		
STAT7610	**Statistical Theory and Methods II- Core I course**	3		
STAT7020	Regression Analysis- **Core I course**	3		
STAT7840	Applied Multivariate Statistical Analysis - **Core I course**	3		
STAT7650	Computational Statistics - **Core I course**	3		
STAT7630	Bayesian Statistics- **Core II STAT course**	3		
STAT7850	Theory of Statistical Inference - **Core II STAT course**	3		
STAT7030	Categorical Data Analysis- **Core II STAT course**	3		
STAT7700	Generalized Linear Models - **Core II STAT course**	3		
STAT7800	Linear Models **-Core II STAT course**	3		
STAT7860	Applied Time Series Analysis **-Core II STAT course**	3		
MATH 7800	Probability I **--Core II MATH course**	3		
MATH7200	Real Analysis I**--Core II MATH course**	3		
MATH/STAT 7810	Modern Stochastic Processes I **- Core II MATH course**	3		
MATH/STAT 7820	Applied Stochastic Processes I **- Core II MATH course**	3		
MATH 7810	Probability II **-Core II MATH course**	3		
MATH 7210	Real Analysis II **-Core II MATH course**	3		
MATH/STAT 7830	Applied Stochastic Processes II **- Core II MATH course**	3		
STAT7950	Statistics Seminar	1	Y	
STAT7930	Statistical Consulting Practicum	3		Y

Program Electives/Concentrations/Tracks				
STAT6210	R Programming in Data Science	3		
Research/Thesis				
STAT8990	Research and Dissertation	10	Y	
	***Total Credit Hours Required for Completion**	**60**		

***Note**: The total credit hours should equal the total credit hours in the Curriculum Overview table (V.B, p. 9).

IV. Program Resource Requirements

A. Proposed Program Faculty*

Current Faculty and Faculty to Be Hired

Complete the following **New Academic Degree Proposal Faculty Roster** to provide a brief summary and qualifications of current faculty and potential new hires specific to the program.

***Note**: Institutions must maintain and have current as well as additional faculty curriculum vitae available upon ACHE request for as long as the program is active, but CVs are **not** to be submitted with this proposal.

Current Faculty			
1	**2**	**3**	**4**
CURRENT FACULTY NAME (FT, PT)	**COURSES TAUGHT including Term, Course Number, Course Title, & Credit Hours (D, UN, UT, G, DU)**	**ACADEMIC DEGREES and COURSEWORK Relevant to Courses Taught, including Institution and Major; List Specific Graduate Coursework, if needed**	**OTHER QUALIFICATIONS and COMMENTS Related to Courses Taught and Modality(ies) (IP, OL, HY, OCIS)**
Ash Abebe (FT)	For 22 years, he taught many graduate level statistics courses such as 1. Fall/Spring- STAT7000 Experimental Stats I-4 ch, 2.Fall/Spring-STAT7600/7610 -Statistical Theory and Methods I and II, 3.Fall-STAT 7800 Linear Models, 4.Spring-STAT 7010 Experimental Statistics II, and undergraduate courses such as 5. Fall-STAT3600 Probability and Statistics I Courses 2-5 are all 3ch.	PhD in Statistics, Western Michigan University Postdoctoral training, Stanford University	IP, HY, OL
Nedret Billor(FT)	For 21 years, she taught many graduate level statistics courses such as 1. Fall/Spring- STAT7000 Experimental Stats I-4 ch, 2..Fall/Spring-STAT7600/7610 -Statistical Theory and Methods I and II 3. Fall-STAT 7020 Regression Analysis 4. Spring-STAT 7840 Applied Multivariate Statistical Analysis and undergraduate courses such as 5. Fall-STAT3010 Statistics For Engineers and Scientists Courses 2-5 are all 3ch.	PhD in Statistics, Sheffield University, UK	IP, OL

Current Faculty			
1	2	3	4
CURRENT FACULTY NAME (FT, PT)	**COURSES TAUGHT including Term, Course Number, Course Title, & Credit Hours (D, UN, UT, G, DU)**	**ACADEMIC DEGREES and COURSEWORK Relevant to Courses Taught, including Institution and Major; List Specific Graduate Coursework, if needed**	**OTHER QUALIFICATIONS and COMMENTS Related to Courses Taught and Modality(ies) (IP, OL, HY, OCIS)**
Mark Carpenter (FT)	For 21 years, he taught many graduate level statistics courses such as 1. Fall/Spring-STAT7000 Experimental Stats I-4 ch, 2..Fall/Spring-STAT7600/7610 -Statistical Theory and Methods I and II, 3. Fall-STAT 7020 Regression Analysis, 4. Spring- STAT 7840 Applied Multivariate Statistical Analysis, and undergraduate courses 5. Fall/Spring STAT3600/3610 Probability Statistics II and II. Courses 2-5 are all 3ch.	PhD in Statistics, University of Louisiana	IP, OL
Elvan Ceyhan (FT)	1.Fall STAT7630 Bayesian Statistics, 2.Spring STAT7650 Computational Statistics, 3. Fall-STAT6600 Probability and Statistics for Data Science, 4. Fall/Spring-STAT7600/7610 -Statistical Theory and Methods I and II, 3ch each,	PhD in Statistics, Johns Hopkins University Postdoctoral training, Harvard University	IP, HY, OL
Huan He (FT)	Fall- MATH2667 Honors Topics in Linear Algebra-3ch.	PhD in Computer Science, Emory University Postdoctoral training, University of Pennsylvania	IP
JooChul Lee (FT)	Fall-STAT7000 Experimental Statistics I-4ch.	PhD in Statistics, University of Connecticut Postdoctoral training, University of Pennsylvania	IP
Haoran Li (FT)	1.Fall- STAT3600 Probability and Statistics I, 2..Fall/Spring-STAT7600/7610 -Statistical Theory and Methods I and II, 3. Spring-STAT7780 Survival Analysis, 4. Spring-STAT 7860 Applied Time Series Analysis. 3ch each,	PhD in Statistics, University of California, Davis Postdoctoral training, Columbia University	IP, HY, OL
Yan Li (FT)	1. Fall- STAT 3010 Statistics For Engineers and Scientists, 2.Spring- STAT 7670 Applied Longitudinal Data Analysis, 3. Fall-STAT6600 Probability and Statistics for Data Science. 3ch each,	PhD in Statistics, University of Connecticut Postdoctoral training, University of Michigan	IP

Current Faculty			
1	**2**	**3**	**4**
CURRENT FACULTY NAME (FT, PT)	**COURSES TAUGHT including Term, Course Number, Course Title, & Credit Hours (D, UN, UT, G, DU)**	**ACADEMIC DEGREES and COURSEWORK Relevant to Courses Taught, including Institution and Major; List Specific Graduate Coursework, if needed**	**OTHER QUALIFICATIONS and COMMENTS Related to Courses Taught and Modality(ies) (IP, OL, HY, OCIS)**
Roberto Molinari (FT)	1. Spring-STAT 7860 Applied Time Series Analysis, 2. Fall-STAT1010 Data Epistemology, 3.Fall-STAT4000 Introduction to Data Science, 4.Fall -STAT7030 Categorical Data Analysis, 5. Fall-STAT6210 R Programming for Data Science. 3ch each,	PhD in Statistics, University of Geneva Postdoctoral training, University of California, Santa Barbara Postdoctoral training, Penn State	IP, OL
Peng Zeng (FT)	For 19 years, he taught many graduate level statistics courses such as 1. Fall/Spring-STAT7000 Experimental Stats I-4 ch, 2..Fall/Spring-STAT7600/7610 -Statistical Theory and Methods I and II, 3. Fall-STAT 7020 Regression Analysis, 4. Spring-STAT7030 Categorical Data Analysis, 5. Spring-STAT7010 Experimental Statistics II. Courses 2-5 are all 3ch.	PhD in Statistics, Purdue University	IP, HY, OL
Jingyi Zheng (FT)	1.Fall- STAT 6000 Intermediate Statistical Methods in Data Science, 2.Spring-STAT 6650 Statistical Learning. 3ch each.	PhD in Statistics, University of California, Davis	IP, HY, OL

Additional Faculty (To Be Hired)			
1	**2**	**3**	**4**
FACULTY POSITION (FT, PT)	**COURSES TO BE TAUGHT including Term, Course Number, Course Title, & Credit Hours (D, UN, UT, G, DU)**	**ACADEMIC DEGREES and COURSEWORK Relevant to Courses Taught, including Institution and Major; List Specific Graduate Coursework, if needed**	**OTHER QUALIFICATIONS and COMMENTS Related to Courses Taught and Modality(ies) (IP, OL, HY, OCIS)**

Abbreviations: (FT, PT): Full-Time, Part-Time; (D, UN, UT, G, DU): Developmental, Undergraduate Nontransferable, Undergraduate Transferable, Graduate, Dual: High School Dual Enrollment
Course Modality: (IP, OL, HY, OCIS): In-Person, Online, Hybrid, Off-Campus Instructional Site
Courses Taught/To be Taught – For a substantive change prospectus/application, list the courses *to be taught*, not historical teaching assignments.

B. All Proposed Program Personnel

Provide all personnel counts for the proposed program.

Employment Status of Program Personnel		Personnel Information		
		Count from Proposed Program Department	Count from Other Departments	Subtotal of Personnel
Current	Full-Time Faculty	11		
	Part-Time Faculty			
	Administration			
	Support Staff			
**New To Be Hired	Full-Time Faculty			
	Part-Time Faculty			
	Administration			
	Support Staff			
		Personnel Total		

****Note**: **Any new funds** designated for compensation costs (Faculty (FT/PT), Administration, and/or Support Staff to be Hired) **should be included** in the **New Academic Degree Program Business Plan Excel file**. Current personnel salary/benefits (Faculty (FT/PT), Administration, and/or Support Staff) **should not be included** in the **Business Plan**.

Provide justification that the institution has proposed a sufficient number of faculty (full-time and part-time) for the proposed program to ensure curriculum and program quality, integrity, and review.

C. Equipment

Will any special equipment be needed specifically for this program? **Yes ☐ No ☒**

If *yes*, list the special equipment. Special equipment cost should be included in the **New Academic Degree Program Business Plan Excel file.**

D. Facilities

Will any new facilities be required specifically for the program? **Yes ☐ No ☒**

If *yes*, list only **new** facilities. New facilities cost should be included in the **New Academic Degree Program Business Plan Excel file.**

Will any renovations to any existing infrastructure be required specifically for the program? **Yes ☐ No ☒**

If *yes*, list the renovations. Renovation costs should be included in the **New Academic Degree Program Business Plan Excel file.**

E. Assistantships/Fellowships

Will the institution offer any assistantships specifically for this program? **Yes ☐ No ☒**

If *yes*, how many assistantships will be offered?

The expenses associated with any *new* assistantships should be included in the **New Academic Degree Program Business Plan Excel file.**

F. Library

Provide a brief summarization (one to two paragraphs) describing the current status of the library collections supporting the proposed program.

Will additional library resources be required to support the program? **Yes ☐ No ☒**

If *yes*, briefly describe how any deficiencies will be remedied, and include the cost in the **New Academic Degree Program Business Plan Excel file.**

The Auburn University Libraries are well-equipped to support the PhD in Statistics and Data Science program. The library collections include an extensive range of electronic and print resources covering key topics in statistics, data science, machine learning, and related fields. These resources provide access to essential academic journals, e-books, and databases such as JSTOR, IEEE Xplore, SpringerLink, and ScienceDirect, all of which offer cutting-edge research materials that are crucial for the program.

G. Accreditation Expenses

Will the proposed program require accreditation expenses? **Yes ☐ No ☒**

If *yes*, briefly describe the estimated cost and funding source(s) and include cost in the **New Academic Degree Program Business Plan Excel file.**

H. Other Costs

Please explain any other costs to be incurred with program implementation, such as marketing or recruitment costs. Be sure to note these in the **New Academic Degree Program Business Plan Excel file.**

N/A

I. Revenues for Program Support

Will the proposed program require budget reallocation? **Yes ☐ No ☒**

If *yes*, briefly describe how any deficiencies will be remedied and include the revenue in the **New Academic Degree Program Business Plan Excel file.**

Will the proposed program require external funding (*e.g.*, Perkins, Foundation, Federal Grants, Sponsored Research, etc.)? **Yes ☐ No ☒**

If *yes*, list the sources of external funding and include the revenue in the **New Academic Degree Program Business Plan Excel file.**

Please describe how you calculated the tuition revenue that appears in the **New Academic Degree Program Business Plan Excel file.** Specifically, did you calculate using cost per credit hour or per term? Did you factor in differences between resident and non-resident tuition rates?

New Academic Degree Program Summary/Business Plan

Use the Excel form from ACHE's Academic Program webpage located at https://www.ache.edu/index.php/forms/, named **New Academic Degree Program Business Plan**, to complete the New Academic Program Degree Proposal.

Instructions and definitions are provided in the Excel file. **The New Academic Degree Program Business Plan should be uploaded as an Excel file (.xlsx) in the Academic Program Review (APR) Portal.**

Steps for Submitting the New Academic Degree Proposal

1. Complete the **New Academic Degree Proposal** document.
2. Attach the letters of support from external entities listed in *Section I.D.* at the end of the **New Academic Degree Proposal** document.
3. Save the **New Academic Degree Proposal** document as a **.pdf file**.
4. Complete the **New Academic Degree Program Business Plan** and save as an **.xlsx file.**
5. Login to the Academic Program Review (APR) Portal at apr.ache.edu using your ACHE-provided login information. If you are not a designated user for your institution, contact your designated user.
6. Provide responses to questions in the APR Portal.
7. Upload the **New Academic Degree Proposal .pdf file** in the APR Portal.
8. Upload the **New Academic Degree Program Business Plan .xlsx file** in the APR Portal.
9. Click to "Validate" the proposal and then address any issues with your submission.
10. Once validation is clear, click "Review" to check your responses before submitting. If all looks good, click "Submit" at the bottom of the review screen.
11. The system will then prompt you to "Lock" the submission. Your proposal is considered submitted only once it has been locked within the APR Portal.

NOTE: Proposals that have not been locked by the deadline will not be reviewed

ACADEMIC DEGREE PROGRAM PROPOSAL SUMMARY

INSTITUTION:	**AUBURN UNIVERSITY**		
PROGRAM NAME:	**STATISTICS AND DATA SCIENCE**	**CIP CODE:**	**30.7001**
SELECT LEVEL:	**GRADUATE (DOCTORATE)**		

ESTIMATED *NEW* EXPENSES TO IMPLEMENT PROPOSED PROGRAM

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	TOTAL
FACULTY	$0	$0	$0	$0	$0	$0	$0	$0
ADMINISTRATION/STAFF	$0	$0	$0	$0	$0	$0	$0	$0
EQUIPMENT	$0	$0	$0	$0	$0	$0	$0	$0
FACILITIES	$0	$0	$0	$0	$0	$0	$0	$0
ASSISTANTSHIPS/FELLOWSHIPS	$0	$0	$0	$0	$0	$0	$0	$0
LIBRARY	$0	$0	$0	$0	$0	$0	$0	$0
ACCREDITATION AND OTHER COSTS	$0	$0	$0	$0	$0	$0	$0	$0
TOTAL EXPENSES	$0	$0	$0	$0	$0	$0	$0	**$0**

NEW REVENUES AVAILABLE FOR PROGRAM SUPPORT

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	TOTAL
REALLOCATIONS	$0	$0	$0	$0	$0	$0	$0	$0
EXTERNAL FUNDING	$0	$0	$0	$0	$0	$0	$0	$0
TUITION + FEES	$0	$0	$0	$0	$0	$0	$0	$0
TOTAL REVENUES	$0	$0	$0	$0	$0	$0	$0	**$0**

ENROLLMENT PROJECTIONS

Note: "New Enrollment Headcount" is defined as unduplicated counts across years.

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	AVERAGE
FULL-TIME ENROLLMENT HEADCOUNT	No data reporting	3	5	7	9	11	11	**7.67**
PART-TIME ENROLLMENT HEADCOUNT		0	0	0	0	0	0	**0.00**
TOTAL ENROLLMENT HEADCOUNT		3	5	7	9	11	11	**7.67**
***NEW* ENROLLMENT HEADCOUNT**		3	8	15	13	21	27	**14.50**
Validation of Enrollment			**YES**	**YES**	**YES**	**YES**	**YES**	

DEGREE COMPLETION PROJECTIONS

Note: Do not count Lead "0"s and Lead 0 years in computing the average annual degree completions.

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	AVERAGE
DEGREE COMPLETION PROJECTIONS	No data reporting	3	4	5	5	5	5	**4.50**