Proposal for a New Degree Program

I. Information and Rationale

A. Primary Contact Information

Institution: Alabama A&M University

Contact: Dr. John Jones

Title: Provost & Vice President for Academic Affairs

Email: john.jones@aamu.edu

Telephone: 256-372-5275

B. Program Information

Date of Proposal Submission: 6/30/2025

Award Level: Bachelor's Degree

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

Field of Study/Program Title: Artificial Intelligence (AI)

CIP Code (6-digit): 11.0102

C. Administration of the Program

Name of Dean and College: Dr. Zhengtao Deng, College of Engineering, Technology and Physical Sciences (CETPS)

Name of Department/Division: Department of Electrical Engineering and Computer Science (EECS)

Name of Chairperson: Dr. Andrew Scott

D. Implementation Information

Proposed Program Implementation Date: 8/15/2026

Anticipated Date of Approval from Institutional Governing Board: 6/27/2025

Anticipated Date of ACHE Meeting to Vote on Proposal: 9/12/2025

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

Other Considerations for Timing and Approval (e.g., upcoming SACSCOC review): None

E. Concise Program Description

The objective of the proposed Bachelor of Science in Artificial Intelligence (BSAI) program is to supply competent practitioners to the fast-growing fields of Artificial Intelligence and Machine Learning, while providing the opportunity for AAMU students to be prepared for

cutting-edge high demand careers in the AI/ML industry within Huntsville, the State of Alabama and throughout the nation. The proposed program is in alignment with the mission of Alabama A&M University, (*e.g. "…providing a student-centered educational environment for the emergence of scholars, scientists, leaders, and critical thinkers who are equipped to excel through their contributions and leadership in a 21st century national and global society."*)

The proposed BSAI program will include 125 credit hours of coursework and a significant capstone experience. The proposed AI BS major curriculum will include eleven core courses and seven elective courses. The core courses provide foundational skills in programming and AI skillsets including; introduction to AI conception, deep learning, reinforcement learning, natural language processing, speech processing, advanced programming, data structures, artificial intelligence, computer vision, neural networks, and the two-semester sequence (6 hours) senior capstone courses, AI401 and AI402, will be required for students to practice hands-on development of products in artificial intelligence. The elective courses cover relevant topics in; advanced programming, image processing, operating systems, database management, robotics, and high-performance computing. In addition, courses in mathematics (17 hours), science (8 hours), cognitive psychology (3 hours), ethics (3 hours), and general education courses are included in the BSAI program.

Work-based or experiential learning is not required.

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. The EECS department offers ABET accredited BSCS and BSEE programs, as well as graduate MSCS and MSEE programs. The CS program has offered a Bachelor of Science in Computer Science with an **optional AI concentration, since Spring 2022**. Multiple EECS program faculty have academic and/or research experience in the area of Artificial Intelligence.
2. At AAMU, the current AI concentration consists of seven courses; computer architecture, operating systems, robotics programming, introduction to image processing, machine learning, and database management system. The proposed new BSAI program will leverage existing courses, and extend the current AI concentration.
3. EECS Program faculty have numerous external research funded projects in the area of artificial intelligence. This extramural funding success highlights the quality and credentials of the program faculty in the AI area.

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. Boeing
2. Lockheed Martin

II. Background with Context

A. Student Learning Outcomes

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

Students who complete the Artificial Intelligence (BS) program will be able to:

1. Analyze a complex computing problem and apply principles of computing and other relevant disciplines to identify solutions.
2. Design, implement, and evaluate a computing-based solution to meet a given set of computing requirements in the context of the program's discipline.
3. Communicate effectively in a variety of professional contexts.
4. Recognize professional responsibilities and make informed judgments in computing practice based on legal and ethical principles.
5. Function effectively as a member or leader of a team engaged in activities appropriate to the program's discipline.

6. Apply computer science theory and software development fundamentals to produce computing-based solutions.

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
11.0102	Artificial Intelligence (BS)	University of South Florida	N/A (not in Alabama)
11.0102	Artificial Intelligence (BS)	North Carolina A&T State University	N/A (not in Alabama)

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
BS	Computer Science	shared courses, shared faculty
BS	Electrical Engineering	shared resources

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.

We are exploring collaboration with internal programs for additional coursework and student capstone material that would align with the proposed program. For example, we are working with CETPS faculty that have external funding in AI related research for course development and design project support.

E. Specialized Accreditation

1. Will this program have any external accreditation requirements in addition to the institution's SACSCOC program requirements? **Yes ☒ No ☐**

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

   ABET-CAC (Computing Accreditation Commission) (AI Program Requirements TBD)

   Since AI is a nascent academic field, there is not currently an existing ABET program criteria for the discipline. However, in recognition of the need, ABET has approved the ABET-CAC (Computing Accrediting Commission) and the CSAB (Computing Sciences Accreditation Board) as the lead professional society for Artificial Intelligence, Machine Learning, and similarly named programs at the annual ABET October 2024 Board of Delegates Meeting. CAC and CSAB are charged by ABET with developing the program criteria for AI/ML. While there is not currently an anticipated date for final approval and implementation by ABET, the AAMU EECS(AI) department is developing the proposed BSAI curriculum in anticipation of this criteria by the start date. The BSCS program at AAMU is currently accredited under the ABET-CAC commission, so the department faculty and leadership have experience with those requirements. (Ref: https://csab.org/csab-named-lead-society-for-program-criteria-in-artificial-intelligence-machine-learning/)

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.

Neither professional licensure nor industry certification is required for graduates to gain entry-level employment.

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.

Further education/training is not required for graduates to gain entry-level employment.

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.

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.

It is intended that the Artificial Intelligence (BS) program would be delivered exclusively in person. Many of the assignments and coursework are designed to include in person exams and interactive in class assignments, as well as team work in the Capstone sequence.

No program requirement can be completed through competency-based assessment.

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.

Undergraduate enrollment in the closely related Computer Science (CS) program has grown substantially over the past few academic years, with a 57% increase from Fall 2022 to Fall 2024. Total enrollment for Fall 2024 is 487 for BSCS program with each student enrolled in one of three concentrations; General CS, Cybersecurity, and Artificial Intelligence. Participation in the existing Artificial Intelligence courses is significant. This trend is expected to continue along with the growing global interest in AI. In addition, the CS program adopted

in August 2024, a minor in Data Science for service to the general student population, which features multiple overlapping courses with AI topics.

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**): 15-1221 Computer Information and Research Scientists

SOC 2 (optional): 15-2051 Data Scientists

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 burgeoning need for effective AI/ML professionals, is a widely recognized national trend. Professionals in these positions are commonly mapped to: "Computer Information and Research Scientists," SOC: 15-1221; and "Data Scientists," SOC: 15-2051 by the US Bureau of Labor and Statistics (BLS).

On a national level for 2023 data, the BLS reports high median pay and very strong job outlook over the next ten years for Computer and Information Research Scientists with BS and MS degrees, and Data Scientists with BS education levels. BLS reports that SOC: 15-1221 positions in industry typically require at least a MS degree, but some positions may only require a BS degree. By providing the AI/ML specializations at the BS level, it is anticipated that our BSAI students will have access to these positions. This is shown in Figure 1.

Quick Facts: Computer and Information Research Scientists	
2023 Median Pay	$145,080 per year $69.75 per hour
Typical Entry-Level Education	Master's degree
Work Experience in a Related Occupation	None
On-the-job Training	None
Number of Jobs, 2023	36,600
Job Outlook, 2023-33	26% (Much faster than average)
Employment Change, 2023-33	9,400

Figure 1: https://www.bls.gov/ooh/computer-and-information-technology/computer-and-information-research-scientists.htm

In addition, the SOC: 15-2051 positions typically require only BS level education. National BLS from 2023 for median pay and outlook data for the Data Scientist category is shown in Figure 2.

Quick Facts: Data Scientists	
2023 Median Pay	$108,020 per year $51.93 per hour
Typical Entry-Level Education	Bachelor's degree
Work Experience in a Related Occupation	None
On-the-job Training	None
Number of Jobs, 2023	202,900
Job Outlook, 2023-33	36% (Much faster than average)
Employment Change, 2023-33	73,100

Figure 2: https://www.bls.gov/ooh/math/data-scientists.htm

On the Alabama state level, the Federal Bureau of Labor and Statistics reports for 2023, the following:

State of AL Statistics - 2023				
Category (SOC Code)	Total Employed Headcount[1]	Annual Mean Wage[1]	Hourly[1]	10 yr Job Outlook[2,3] (2023-2033)
Computer and Information Research Scientist (15-1221)	480 Statewide (420 in HSV)	105,360 (105,970)	50.66 (50.95)	26%
Data Scientists (15-2051)	1120 Statewide (550 in HSV)	99,040 (107,620)	47.61 (51.74)	36%

[1] https://data.bls.gov/oes/#/geoOcc/Multiple%20occupations%20for%20one%20geographical%20area
[2] https://www.bls.gov/ooh/computer-and-information-technology/computer-and-information-research-scientists.htm
[3] https://www.bls.gov/ooh/math/data-scientists.htm

There is a strong demand in Huntsville and Alabama as a whole for AI professionals.

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**	62
Credit hours required in **program courses**	42
Credit hours in **program electives/concentrations/tracks**	21
Credit hours in **free electives**	0
Credit hours in **required research/thesis**	0
Total Credit Hours Required for Completion	**125**

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:

93 transfer credits maximum applicable to the program requirements. There is a 25% minimum residency requirement at AAMU. In addition, a minimum of 50% of the total requirements (62 hours) must be successfully completed at a 4-year institution.

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

8 semesters (4 academic years)

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

16 semesters (8 academic years) for ½ time students

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

Undergraduate Curriculum Plan

Undergraduate Curriculum Checklist:

1. Overview ☑
2. Components ☑
3. Options (as required) ☐

1. Undergraduate Overview

Enter the credit hour value for all applicable components (N/A if not applicable).
The credit hours MUST match the credit hours in the Curriculum Components table.

Curriculum Overview of Proposed Program	
Credit hours required in **General Education**	62
Credit hours required in **Program Courses & Required Electives**	57
Credit hours in **Program Options (concentrations/specializations/tracks)**	0
Credit hours in **Free Electives**	0
Credit hours in required **Capstone/Internship/Practicum**	6
Total Credit Hours Required for Completion:	**125**

Maximum number of credits that can be transferred in from another institution and applied to the program:	93
Intended program duration in semesters for full-time students:	8
Intended program duration in semesters for part-time students:	16

	YES	NO
Does the program require students to demonstrate industry-validated skills, specifically through an embedded industry-recognized certification, structured work-based learning with an enployer partner, or alignment with nationally recognized industry standards?:	☐	☑

If **yes**, please explain (i.e., number of hours required, etc.):

	YES	NO
Does the program inlcude any concentrations/ tracks/ options?	☐	☑

If **yes**, please explain (i.e., define):

2. Undegraduate Components

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.

Insert Additional Rows as Needed				
Institution:	Alabama A&M University			
Program Name:	BS in Artificial Intelligence			
Program Level:	UNDERGRADUATE (BACHELOR'S)			
Curriculum Components of Proposed Program				
Course Number	**Course Name**	**Credit Hours**	**New? (Y)**	**WBL? (Y)**
General Education Courses				
ENG 101	Composition I (Area I)	3		
ENG 102	Composition II (Area I)	3		
	Fine Arts Elective (Area II)	3		
	Literature Sequence I (Area II)	3		
	Literature Sequence II (Area II)	3		
PHL 206	Ethics (Area II)	3		
MTH 125	Calculus I (Area III)	4		
PHY 213	Physics I w/Lab (Area III)	4		
PHY 214	Physics II w/Lab (Area III)	4		
HIS101/201	History Sequence I (Area IV)	3		
HIS102/202	History Sequence II (Area IV)	3		
ECO231/232	Economics (Area IV)	3		
	Social/Behavioral Science Elective (Area IV)	3		
ORI 101	Orientation I (Area V)	1		
ORI 102	Orientation II (Area V)	1		
	Health Science Elective (Area V)	2		
CS 104	Intro. to Computers and Ethics (Area V)	3		
AI 108	Python Programming II (Area V)	3	Y	
CS 109	Intro. to Programming II (Area V)	3		
MTH 126	Calculus II (Area V)	4		
MTH 237	Intro. to Linear Algebra	3		
	**** Total of 62 credit hours ****			
Program Courses and Required Electives				
CS 203	Discrete Structures	3		
MTH 453	Probability and Statistics	3		
PSY 320	Cognitive Psychology	3		
AI 350	AI Conception	3	Y	
AI 440	Deep Learning & Neural Networks	3	Y	
AI 460	Reinforcement Learning	3	Y	
AI 465	Natural Language Processing	3	Y	
AI 470	Speech Processing	3	Y	
CS 206	Intro to Java Programming I	3		
CS 215	Data Structures	3		
CS 430	Machine Learning	3		
CS 450	Artificial Intelligence	3		
CS 309	Computer Graphics	3		
CS 314	Advanced Programming	3		
CS 381	Computer Organization	3		
CS 384	Operating Systems	3		
CS 389	Programming in Robotics Systems	3		

	CS/AI/ENG Elective	3		
CS 490	High Performance Computing	3		
	**** Total of 57 credit hours ****			
Program Options (enter total credit hours from all options below)				
Free Electives				
Capstone/Internship/Practicum				
AI 401	AI Capstone I	3	Y	
AI 402	AI Capstone II	3	Y	
	**** Total of 6 credit hours ****			
Total Credit Hours Required for Completion:		**125**		

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)**
Venkata Atluri (FT)	Data Structure (CS215, 3 hours, UG, Spring and Fall)	MS, Computer Science, Alabama A&M University	
Nelson Barnes (FT)	Adavance Programming (CS314, 3 hours, UG, Spring and Fall)	MS, Computer Science, Alabama A&M University,	
Jian Fu (FT)	Computer Graphics (CS309, 3 hours, UG, Fall 2022)	Ph.D., Computer Science & Engineering, University of Alabama in Huntsville	
Yujian Fu (FT)	Machine Learning (CS430, 3 hours, UG, Spring 2022 – Spring 2025)	Ph.D., Computer Science, Florida International University	
Kaveh Heidary (FT)	Speech Processing (AI 470, 3 hours, UG, Fall 2027)	Ph.D., Electrical Engineering,Syracuse University	
Ed Pearson (FT)	Intro. To Programming II (CS109, 3 hours, UG, Fall 2023, Fall 2024)	Ph.D., Computer Science, Mississippi State University	
Andrew Scott (FT)	High Performance Computing (CS490/EE425, 3 hours, UG, Spring/Fall)	Ph.D., Computer Science and Engineering, University of Missouri	
Xiang Zhao (FT)	Computer Organization (CS381, 3 hours, UG, Spring 2025)	Ph.D., Computer Science, University of Alabama in Huntsville	
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)**
New Faculty1 (FT)	Programming in Python II, (AI 108, 3 hours, UG) Discrete Structures (CS203, 3 hours, UG) AI Conception (AI 350, 3 hours, UG)	PhD in CS, EE, Data Science, AI or closely related field	
New Faculty2 (FT)	AI Captone I, II (AI401, 3 hours, UG) (AI402, 3 hours, UG) Deep Learning & Neural Networks (AI440, 3 hours, UG)	PhD in CS, EE, Data Science, AI or closely related field	
New Faculty3 (FT)	Reinforcement Learning (AI460, 3 hours, UG) Natural Language Processing (AI465, 3 hours, UG) CS 450 (Artifical Intelligence, 3 hours, UG)	PhD in CS, EE, Data Science, AI or closely related field	

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)

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	8	0	8
	Part-Time Faculty	0	0	0
	Administration	1	0	1
	Support Staff	0	0	0
**New To Be Hired	Full-Time Faculty	3	0	3
	Part-Time Faculty	0	0	0
	Administration	0	0	0
	Support Staff	0	0	0
		Personnel Total		**12**

****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.

The proposed "Current" faculty are experienced, and presently engaged in teaching courses that are included in the proposed BSAI curriculum. The proposed "New" faculty will be engaged to develop the eight newly proposed courses for the AI program, and will be assigned to assist in developing student outcomes, course outcomes, and program outcomes for the proposed BSAI program. In addition, they will assist with the consultant to develop self-study and accreditation materials for the anticipated ABET accreditation team to review. Based on their historical experience administering multiple STEM programs at AAMU, the Dean of the College of Engineering, Technology and Physical Sciences, and the Provost of AAMU are confident that the "Current" and "New" faculty are more than sufficient 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.

Library resources are provided centrally by the University. The main library is the J. F. Drake Memorial Learning Resources Center (LRC) located in the north side of the AAMU campus, a short walk from AJBH and most departments. The catalog of library resources is online and accessible from the university computing network to university employees and students. In addition to several electronic repositories of publications, there also are search engines that identify resources that are available from a variety of sources. The library is a member of both state and regional consortia for sharing resources. Print material that is not available locally normally can be obtained through inter-library loan within one or two days.

The technical subject collection contains books, journals, audio-visuals and conference proceedings in; artificial intelligence, bioengineering, civil engineering, computer science, electrical engineering, environmental engineering, industrial engineering, materials science and engineering, mechanical engineering, nuclear engineering, operations research, and technology. The book collection consists of subjects that support the Artificial Intelligence program, such as; Machine Learning, Reinforcement Learning, Natural Language processing, Speech processing, pattern recognition, health monitoring, and robotics.

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.**

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.**

Seeking ABET Accreditation in Year 5. Expenses include ABET annual dues of $3,000, and initial accreditation visit fees of $10,000. Consultant for SACSCOC prospectus, external program assessment and self-study evaluations, $30,000. Funded from state program funds.

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.**

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.**

AAMU will invest $850K over the first three years of the program to pay the cost of new hires and operation of the program. The program is estimated to be viable after Year 3, per the attached spreadsheet analysis.

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?

The revenues were calculated with current average annual tuition rate of $15.3K referencing historical enrollment demographics for the AAMU – College of Engineering, Technology, and Physical Science (CETPS) of 66% in-state tuition (~$10K) and 34% out-of-state tuition (~$18K) students.

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 for consideration of inclusion on the next Commission agenda.

New Academic Degree Program Summary/Business Plan

ACADEMIC DEGREE PROGRAM PROPOSAL SUMMARY								
INSTITUTION:	**Alabama A&M University**							
PROGRAM NAME:	**Artificial Intelligence (BS)**						**CIP CODE:**	**11.0102**
SELECT LEVEL:	**UNDERGRADUATE (BACHELOR'S)**							
ESTIMATED *NEW* EXPENSES TO IMPLEMENT PROPOSED PROGRAM								
	Year 1	**Year 2**	**Year 3**	**Year 4**	**Year 5**	**Year 6**	**Year 7**	**TOTAL**
FACULTY	$486,000	$486,000	$486,000	$500,000	$500,000	$500,000	$515,000	$3,473,000
ADMINISTRATION/STAFF								$0
EQUIPMENT								$0
FACILITIES								$0
ASSISTANTSHIPS/FELLOWSHIPS								$0
LIBRARY								$0
ACCREDITATION AND OTHER COSTS					$43,000			$43,000
TOTAL EXPENSES	$486,000	$486,000	$486,000	$500,000	$543,000	$500,000	$515,000	**$3,516,000**
***NEW* REVENUES AVAILABLE FOR PROGRAM SUPPORT**								
	Year 1	**Year 2**	**Year 3**	**Year 4**	**Year 5**	**Year 6**	**Year 7**	**TOTAL**
REALLOCATIONS	$486,000	$333,200	$27,600					$846,800
EXTERNAL FUNDING								$0
TUITION + FEES	$0	$152,800	$458,400	$764,000	$1,069,600	$1,298,800	$1,497,440	$5,241,040
TOTAL REVENUES	$486,000	$486,000	$486,000	$764,000	$1,069,600	$1,298,800	$1,497,440	**$6,087,840**
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	10	30	50	70	85	98	**57.17**
PART-TIME ENROLLMENT HEADCOUNT								**0.00**
TOTAL ENROLLMENT HEADCOUNT		10	30	50	70	85	98	**57.17**
***NEW* ENROLLMENT HEADCOUNT**		10	20	25	25	25	25	**21.67**
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**	0	5	5	10	12	15	**9.40**

ATTACHMENTS

- Letters of Support for BSAI Program

The Boeing Company
499 Boeing Blvd SW
Huntsville, AL 35826

Dr. ZT Deng
Dean, College of Engineering, Technology and Physical Sciences
Alabama A&M University
Normal, AL 35762

June 11, 2025

Subject: Support for Establishment of a Bachelor of Science Degree in Artificial Intelligence

Dear Dr. Deng,

I am thrilled to learn that the College of Engineering, Technology and Physical Sciences (CETPS) at Alabama A&M University is proposing the establishment of a Bachelor of Science in Artificial Intelligence (BSAI) degree program. This initiative is both timely and visionary. The BSAI program is designed to prepare highly skilled professionals equipped to meet the growing demand for expertise in Artificial Intelligence (AI). Importantly, it will provide Alabama A&M students with the training necessary to compete for high-impact, high-demand positions in AI across Huntsville, the state of Alabama, and the nation.

At The Boeing Company, our mission is "to protect, connect, and explore our world and beyond." We are a leading global aerospace company and a top U.S. exporter, committed to developing, manufacturing, and servicing commercial airplanes, defense products, and space systems. With a strong presence in Huntsville, we continually invest in innovation and workforce development to sustain our leadership in cutting-edge technologies.

The establishment of the AI program at AAMU aligns closely with our need for a highly trained, diverse, and future-focused talent pipeline. AI is core to many of our ongoing projects in defense systems, autonomous platforms, cybersecurity, and space exploration. AAMU's BSAI graduates will be well-positioned to contribute meaningfully to our mission and help shape the future of aerospace and national security technologies.

As an industry and government advisory board member for CETPS, I am confident that this program will be instrumental in developing the next generation of AI leaders and innovators. It will strengthen Alabama's technology ecosystem, support economic development, and elevate the university's role in addressing national and global AI challenges. I wholeheartedly support this initiative and strongly encourage its approval.

Sincerely,

Patrick W. Burden
Executive Director, Business Development and Strategy
Boeing Defense Space and Security
patrick.w.burden@boeing.com
256-763-4580

Lockheed Martin Corporation
6801 Rockledge Drive Bethesda, MD 20817
Telephone 407•306•5467 Mobile 203•224•9198

Michael O. Gordon
Vice President, RMS Operations Strategy & Infrastructure

June 23, 2025

To:
Dr. ZT Deng
Dean, College of Engineering, Technology and Physical Sciences
Alabama A&M University

Subject: Support for the Establishment of a Bachelor of Science Degree Program in Artificial Intelligence

Dear Dr. Deng,

I am very excited to know that the College of Engineering, Technology and Physical Sciences (CSTPS) at AAMU proposed to offer the Bachelor of Science in Artificial Intelligence (BSAI) program to supply competent practitioners to the fast-growing fields of Artificial Intelligence and Machine Learning, while providing the opportunity for AAMU students to be prepared for cutting-edge high demand careers in the AI/ML industry within Huntsville, the State of Alabama and throughout the nation.

I lead the Rotary and Mission Systems (RMS) Business Area Operations Strategy and Infrastructure Organization for Lockheed Martin Corporation. My organization is responsible for Operations Strategy, Facilities Management for over 128 RMS facilities worldwide, Environmental Safety & Health, and other manufacturing technology functions for RMS.

Within my organization as well as Lockheed Martin at large, we are strongly adopting and leveraging AI across our entire enterprise. We have created proprietary Chatbots to assist employees. We are leveraging AI in numerous areas of our building management systems, data analysis as well as Engineering, Design and Production, ..AI/ML, Generative AI. Agentic AI, Large language Models, etc.
We are constantly looking for new employees who are proficient in these areas.

As an industry and Government Advisory Board member for CETPS, I firmly believe that this program will be instrumental in cultivating talent and driving progress within Alabama's technology sector. I fully support this initiative and encourage its approval.

Sincerely,

Michael O. Gordon
Vice President, RMS Operations Strategy & Infrastructure
Lockheed Martin Corporation