

CERTIFICATE IN APPLIED ARTIFICIAL INTELLIGENCE FOR BUSINESS ANALYTICS



SACRAMENTO STATE

In Workflow

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Approval Path

1. 2026-04-15T22:21:10Z
Tota Panggabean (panggabean): Approved for CBA College Committee Chair
2. 2026-04-18T02:18:16Z
Pingsheng Tong (ptong): Approved for CBA Dean

New Program Proposal

Date Submitted: 2026-04-15T16:10:58Z

Viewing: Certificate in Applied Artificial Intelligence for Business Analytics

Last edit: 2026-08-28T20:49:15Z

Changes proposed by: Min Li (101017159)

Academic Group: (College)

CBA

Academic Organization: (Department)

Information Systems and Business Analytics

Catalog Year Effective:

2027-2028 Catalog

NOTE: This degree major program will be subject to program review evaluation within six years after implementation.

Individual(s) primarily responsible for drafting the proposed degree major program:

Name (First Last)	Email	Phone 999-999-9999
Min Li	limin@csus.edu	916-278-7132

Program Snapshot

Type of Program:

Certificate

Title of the Program:

Certificate in Applied Artificial Intelligence for Business Analytics

Designation: (degree terminology)

Certificate - Graduate

Delivery Mode:

Fully Face to Face

Hybrid

Fully Online

What is the instructional modality of all courses in this program?

Synchronous

Please see the CSU/CIP Code Crosswalk: https://www.calstate.edu/csu-system/administration/academic-affairs/academic-programs-innovation-and-faculty-development/Documents/CSU_Codes_to_CIP_2020.pdf

Is this a pilot program?

No

Establishment of a master's degree program should be preceded by a national professional accreditation of the corresponding bachelor's degree major program.

Provide a clear, concise overview of the program proposal (new or change) and provide a justification. For NEW programs describe the purpose and focus of the program, identify the target student population(s), and highlight key strengths and distinguishing features of the program.

Establish the curriculum for a new graduate certificate titled Certificate in Applied Artificial Intelligence for Business Analytics. The certificate leverages existing courses from the Master of Science in Business Analytics (MSBA) program and includes three newly proposed MSBA courses.

Rapid advances in artificial intelligence have created demand for analytics professionals who can integrate, evaluate, and deploy AI-enabled tools in business contexts. While the MSBA provides strong foundations in analytics and predictive modeling, this certificate offers a focused pathway emphasizing applied AI technologies, APIs, deployment considerations, and business use cases. The certificate enhances student preparation without duplicating existing coursework or requiring changes to MSBA degree requirements.

University Learning Goals

Graduate (Masters) Learning Goals:

Disciplinary knowledge

Will this program be required as part of a teaching credential program, a single subject, or multiple subject waiver program (e.g., Liberal Studies, Biology) or other school personnel preparation program (e.g., School of Nursing)?

No

Curriculum Alignment and Assessment

Program Goals

Provide a brief statement of the program's overarching goals and priorities: • Describe the program's mission, focus, and intended impact on students. • Identify broad areas of emphasis (e.g., career preparation, research, community engagement, leadership development). • Goals may be aspirational or developmental and do not need to be directly measurable.

Program Learning Outcomes

Provide measurable, program-specific learning outcomes that reflect the most important competencies students will demonstrate upon completion of the program. Programs are expected to assess and use PLOs for continuous improvement.

Program Learning Outcomes

Learning Outcome

Upon completion of the certificate, students will be able to:

1. Apply artificial intelligence tools and platforms to develop analytics solutions that address business problems.
2. Integrate AI technologies into analytics workflows, including data preparation, model interaction, and output management.
3. Evaluate AI-enabled solutions with respect to deployment feasibility, performance, security, and governance considerations.
4. Analyze current AI research and industry practices to assess relevance and implications for business analytics applications.
5. Translate AI-driven analytical insights into actionable recommendations for business stakeholders.
6. Demonstrate ethical and responsible use of AI in business analytics contexts.

Learning Outcomes Display

Course Code	PLO 1
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Please attach a Comprehensive Program Assessment Plan

ProgramAssessmentPlan.docx

Please attach a Curriculum Map Matrix

CurriculumMapMatrix.docx

Please attach a Five-Year Budget Projection. For NEW programs, also attach a Budget Narrative.

BudgetProjection.docx

Catalog Description (catalog copy):

The **Certificate in Applied Artificial Intelligence for Business Analytics** prepares graduate students to apply contemporary artificial intelligence technologies within business analytics contexts. The certificate emphasizes applied AI tools and platforms, including APIs, prompt engineering, deployment considerations, and strategic business applications. Students examine current AI research and industry practices and develop practical skills in integrating AI-enabled solutions into analytics workflows. The certificate is designed for graduate students seeking applied AI competencies relevant to analytics-driven business roles and may be completed concurrently with a graduate degree. To preserve the academic distinctiveness of the Certificate in Applied Artificial Intelligence for Business Analytics, the curriculum includes certificate-specific elective coursework that is not automatically satisfied through completion of MSBA degree requirements. This ensures that the certificate represents focused, intentional study in applied artificial intelligence beyond the MSBA core curriculum and remains meaningful for students both within and outside the MSBA program. MSBA students may apply some coursework toward both the MSBA degree and the certificate; however, at least two certificate courses (6 units) must be completed outside the ten courses required for the MSBA degree.

Admission and Continuation Requirements (catalog copy): minimum GPA and prerequisites (if applicable), required coursework or preparation, portfolio, test scores, and/or letters of recommendation. For graduate programs: expectations for a relevant bachelor's degree (required or preferred disciplines, prerequisite knowledge, or equivalent experience), include evidence that program requirements conform to the minimum requirements for the culminating experience, as specified in Title 5 Section 40510 The Master's Degree and Section 40511 The Doctoral Degree.

Admission Requirements

Admission to the Certificate in Applied Artificial Intelligence for Business Analytics is open to domestic and international students, including graduate students, upper-division undergraduate students, and working professionals, who meet the following criteria:

1. **Academic Standing, Degree, and GPA**
Applicants must meet one of the following requirements: be an upper-division undergraduate student (junior or senior standing) with a minimum cumulative GPA of 2.5, or hold a four-year bachelor's degree or equivalent from an accredited institution with a minimum cumulative GPA of 2.5, or be enrolled as a graduate student at Sacramento State in good academic standing.
2. **Statement of Purpose**
Applicants must submit a Statement of Purpose describing their academic background, professional experience, and interest in applied artificial intelligence and business analytics.
3. **Résumé**
Applicants must submit a current résumé outlining relevant academic preparation, professional experience, and technical skills.
4. **Letters of Recommendation**
Applicants must submit two letters of recommendation from individuals who can speak to the applicant's academic ability, professional readiness, or potential for success in applied AI and analytics coursework.
5. **Quantitative Preparation**
Applicants with less than three (3) years of analytics-related professional experience must demonstrate completion of at least 6 units of quantitative coursework, with a grade of "C" or higher in each course. Quantitative coursework may include statistics, mathematics, data analysis, quantitative methods, econometrics, or programming-based quantitative courses.
6. **English Language Proficiency (if applicable)**

A foreign language test is required for applicants who earned their undergraduate degree from a country where the official language of instruction is not English. Applicants must submit official English proficiency scores (Institution Code: 4671) from one of the following exams taken within the past two years:

TOEFL iBT: minimum score of 61

IELTS: minimum band score of 6.0

PTE Academic: minimum score of 50

7. International Students and Visa Status

International students may enroll in the certificate; however, the certificate does not independently confer eligibility for F-1 visa sponsorship. International students must be enrolled concurrently in an F-1-eligible degree program at Sacramento State and maintain full-time status to participate in the certificate.

Program Requirements (catalog copy):

Students must complete 12 units to earn the Certificate in Applied Artificial Intelligence for Business Analytics.

Required Courses (6 units)

- **MSBA 220 Applied AI for Business Analytics**
- **MSBA 221 AI Applications in Business Analytics**

Elective Courses (6 units)

Students must complete 6 units from the following MSBA courses, subject to applicable prerequisites or instructor consent:

- **MSBA 201 Programming for Business Analytics**
- **MSBA 206 Data Mining for Business**
- **MSBA 207 Machine Learning for Business**
- **MSBA 214 Big Data Technologies for Business**
- **MSBA 222 Responsible AI in Business Analytics**
- **MSBA 500 Culminating Experience Advanced Topics in Business Analytics**

Overlap Policy

Students enrolled in the MSBA program may apply coursework toward both the MSBA degree and the certificate; however, at least two certificate courses (6 units) must be completed beyond the ten courses needed for the MSBA degree. Students who complete the certificate and are subsequently admitted to the MSBA program may apply certificate coursework toward the MSBA degree, subject to program approval and University policies governing graduate credit.

Additional Requirements

All courses applied toward the certificate must be completed for a letter grade. Students must maintain a minimum cumulative GPA of 3.0 in certificate coursework. Enrollment in certificate courses is subject to completion of applicable prerequisites or instructor consent, as appropriate.

Key: 628