

Microcertificate Fundamentals of Business Analytics

Under Review | Spring 2026

Proposal Information

Workflow Status

In Progress

Graduate Council Agenda Preparation, Graduate College Curriculum

expand ▲

Waiting for Approval | Graduate Council Agenda Preparation

Amanda Morales-Calderon
Lisa Anderson
Amy Glasscock
Sophia McGovern
Kayla Durazo

Proposal to Establish a New Program

Requested Term & Year (The first term for which applications will be accepted and students admitted.) ⓘ

Spring 2026

This proposal can also be viewed at:
<https://asu.kuali.co/cm/#!/programs/view/68c440dd5eb019427f74472d>

General Information

Select Program Level and Type

Graduate certificate

General Program Information

College/School/Institute

W. P. Carey School of Business (CBA)

Department/Division/School ?

WPC Graduate Programs (CBUSMBA)

Name of Program

Microcertificate - Fundamentals of Business Analytics | Review

Program

Fundamentals of Business Analytics

Degree Type

Proposing Faculty Group ?

Dean's office

Responsible Faculty Member or Director

Michele Pfund

Campus or Location options

Add a Different Campus or Location

No

Are you requesting an online offering?

Yes

Complete the Request for Digital Immersion Implementation.

Program Description/Justification



The Microcertificate in Fundamentals of Business Analytics will provide students with skills to be able to analyze and interpret complex data to drive strategic business decisions, apply machine learning models to real-world business challenges, utilize data visualization tools to present insights effectively to leadership, forecast demand, optimize inventory, and plan capacity using data analytics, communicate complex data insights clearly, ensuring actionable recommendations for business improvement. This program is designed for emerging leaders without opportunities to enroll in a master's program who have shown great academic progress. These courses are designed for working professionals with a unique exposure to industry applications of business analytics and artificial intelligence for business

This microcertificate aligns with the ASU design aspiration of "Access" because it attracts a global audience that may not have opportunities for enrollment into a program without this pathway opportunity.

Program Need



The Microcertificate in Fundamentals of Business Analytics, which for some leads to the MS in Business Analytics, offers the possibility of a program with high demand. According to Lightcast, of the total number of associate's, bachelor's, and master's degrees conferred in the U.S. in Data and Business Analytics in 2023 (N=5,396) about 77% was on the master's level (N=4,179)¹. Because of this, facilitating entrance into a graduate program via the micro-certificate might prove popular. Although the field of data analytics is relatively new, the national rate of growth in its degree programs since 2019 has been remarkable. National Center for Educational Statistics (NCES) reports zero graduates from 2012 through 2019; however, from 2020 to 2023 data/business analytics degrees (associate's, bachelor's and master's) increased to a total of 5,396 graduates, with about an equal number of graduates for online (49%) and immersion (51%) platforms. Lightcast reports that degree demand within the Southwest Region (Arizona, California, Utah, New Mexico, Colorado, and Texas) has been similarly impressive, going from zero graduates in 2019 to 1,669 in 2023. Moreover, a greater percentage of graduates earn degrees on the master's level (91% SW vs 77% US) and prefer online (57%) to immersion (43%)².

The audience for this microcertificate is primarily the BEnke certificate students; however, other working professionals who might want a graduate degree in business analytics could be drawn to this program as well. They would include professionals in marketing, project management, computer science, business development and data scientists. According to DataUSA³, of the 238,700 individuals working in market research alone, nearly 56% or 238,700 individuals do not have a master's degree. BEnke certificate students can apply the completed microcertificate to the MS in Business Analytics degree offered by W.P. Carey. Graduates of the microcertificate could enter career fields in areas such as data science, market research, business intelligence and business analysis. Job outcomes include: Information Technology Manager (IT Manager), Supply Chain Manager, Financial Quantitative Analyst, Information Security Analyst, Computer Database Architect, IT Project Manager, Operations Research Analyst, Business Intelligence Analyst and Technical Sales Engineer.

1, 2 Lightcast Q3 2025 dataset extracted from National Center for Educational Statistics, September 2025. Program codes 30.7101 Data Analytics and 30.7102 Business Analytics.

3 DataUSA: <https://datausa.io/>

Specialized Accreditation



The WP Carey programs are AACSB accredited.

State Authorization and Professional Licensure:

State Authorization and Professional Licensure:

Does this degree program include learning placement opportunities (clinical, externship, internship, research, student teaching, etc.)?

N

Will this degree program be offered via distance education (whole or in-part)?

Y

Will in-person instruction be occurring in any jurisdiction, other than the State of Arizona?

N

Does this degree program potentially lead to professional licensure or certification (attorney, nurse, physician, teacher, etc.) for the student? ⓘ

N

Collaborating Units

Are two or more academic units collaborating on this program?

No

Is this an officially recognized joint program?

No

Collaboration and Impact

List other academic units or programs that might be impacted by the proposed program and describe the potential impact (e.g., how the implementation of this program might affect student headcount/enrollment, student recruitment, faculty participation, course content, etc. in other programs) and how the programs might complement each other. If there are no comparable programs, describe why the program is unique at ASU. 

We are utilizing our existing certificate coursework for this microcertificate. This microcertificate will utilize coursework offered in our existing pathway, currently open to all students, who can then apply to our Business Analytics degree. This microcertificate can then be stacked into our Business Analytics degree offered at WPC.

Attach a PDF copy of the letter of collaboration and impact from each Dean, or Dean’s designee at the Assistant or Associate Dean level, from impacted programs and units consulted. 

Course Development

Will a new course subject be required for this program?
No

Will new courses be established? 
No

Graduate Degree Curriculum

Is the proposed certificate a microcertificate of 9 credit hours?
Yes

Allow 400-level courses? 
No

Minimum Credits Required for the Program 
9

Curriculum Requirement Option 1 
9 credit hours

Add another option?
No

Curriculum Requirement Option 1

9 credit hours

Min credits required for this option
9

Primary Requirement (Culminating experience)
Not Required

Additional Requirement(s)

Curriculum option course requirements

Required Core

9

Total Credits

- Complete 9 credits from the following courses:
 - CIS505 - Enterprise Data Analytics (3)
 - CIS541 - Business Data Visualization (3)
 - SCM516 - Descriptive and Predictive Analytics (3)

Grand Total Credits: 9

Additional Curriculum Information

Sharing of Credit Hours with a Degree

Will this proposed certificate program allow sharing of credit hours from another ASU degree program to be used as part of this certificate program?

Yes, students can share the nine hours completed with the business analytics master's program (BABUSANMS).

Projected Enrollment

Enrollment Headcounts	
	Number of Students Majoring
1st Year	10
2nd Year (Yr 1 continuing + new entering)	20
3rd Year (Yr 1 & 2 continuing + new entering)	30
4th Year (Yrs 1, 2, 3 continuing + new entering)	40
5th Year (Yrs 1, 2, 3, 4 continuing + new entering)	50

Additional Enrollment Information

Estimated Timeframe to Complete Program

What is the minimum timeframe that this program can be completed?

1-2 years

If necessary, please provide additional information.

Resources (Faculty, Staff and Others)

Current Faculty ⓘ

Name	Title	Highest Degree Obtained	Area of Specialization or Expertise	Estimated Level of Involvement
Surya Ayyalasomayajula	Clinical Assistant Professor	PhD	Supply Chain	High
Christos Makridis	Research Associate Professor	PhD	Information Systems	High
Tam McCreless	Clinical Assistant Professor	PhD	Information Systems	High
Brett Duarte	Clinical Assistant Professor	PhD	Supply chain Management	Medium
Pei-yu Chen	Chair of Department of Information Systems	PhD	Information Systems	Low
Adegoke Oke	Chain of Department of supply chain management	PhD	Supply chain Management	Low
Geoff Pofahl	Clinical Assistant Professor	Phd	Information Systems	Medium

New Faculty

No additional faculty, using existing courses.

Is your college in the process of reviewing the new faculty? Or has new faculty already been approved?

No

Administration of the Program

No additional offerings, we will be using our existing courses to allow students enrollment into 9 hours of coursework. The 9 hours can then be shared into the Business Analytics masters program upon completion of admission requirements. The faculty directors for Business analytics are Brett Duarte and Geoff Pofahl.

Required Resources

No additional support staff, courses are currently being supported through our pathway teams.

Resource Acquisition

No additional support required.

Graduate Program Admission Requirements

The below sections are for initial admission criteria setup for new programs. Once the program is approved, this section will display the admission text as it appears in the academic catalog/degree search.

Applicants must fulfill the requirements of both the Graduate College and the **[name of college]**. Applicants are eligible to apply to the program if they have earned a bachelor's or master's degree in **[subject area]** or related field; from a regionally accredited institution. Applicants must have a minimum cumulative GPA of 3.00 (scale is 4.00 = "A") in the last 60 hours of a student's first bachelor's degree program, or applicants must have a minimum cumulative GPA of 3.00 (scale is 4.00 = "A") in an applicable master's degree program.

Name of College ?

W. P. Carey School of Business (CBA)

Subject Area(s) ?

any subject field

Is the minimum required cumulative GPA in the last 60 hours of bachelor's degree higher than the standard minimum of 3.00?

Yes

Minimum Cumulative GPA in last 60 hours

Is the minimum required cumulative GPA in an applicable master's degree program higher than the standard minimum of 3.00?

Yes

Minimum Cumulative GPA in an applicable Master's degree

3.0

Applicants are required to submit:

- graduate admissions application and application fee
- official transcripts
- proof of English proficiency

Select additional requirements:
Additional Application Requirements/Materials

An applicant whose native language is not English must provide proof of English proficiency regardless of current residency. If applicable, list any English proficiency requirements that are supplementary to the Graduate College requirement. ?

The program courses will be setup through the Cinlearn offices that support Mandarin speaking course delivery. We currently partner with the Cinlearn offices for our LE courses to be offered to Chinese students.

If any required components require further explanation, explain here.

Additional Admission Information:

Students will be required to meet admission requirements of B or better on the 9 hours of coursework.

Graduate Application Information

Indicate the first term and year in which applications will be opened for admission. Applications will be accepted on a rolling basis after that time. The regular session is only available for summer.

Note: It is the academic unit's responsibility to display program deadline dates on their website.

Campus or Location	Term	Session
ASU Online	Spring	Regular

Application Deadlines ⓘ

Modality	Term	Session	Deadline	Type
Online	Spring	Session A/C		Final

Program Admission Deadline Website Address

<https://wpcarey.asu.edu/masters-programs/business-analytics/application-process>

Fees

Is a program fee required? ⓘ

No

Degree Search and Operational Information

Marketing Description ⓘ

Build the skills to turn data into actionable insights with this three-course microcertificate program in data analytics fundamentals.

Degree Search Program Description ⓘ

The microcertificate in fundamentals of business analytics is designed for individuals who want to strengthen their ability to interpret and apply data in business contexts. Drawing from courses offered through W. P. Carey Graduate programs, this microcertificate offers students a high-quality, graduate-level learning experience.

Provide a brief description of career opportunities available for this program. ⓘ

Graduates have the essential academic preparation required for roles that involve deriving value from data and modeling, leading data-driven analyses and creating critical business advantages.

Career examples include:

- business intelligence analyst
- computer database architect

- data analyst
- IT project manager

Global Experience: Provide a brief description of global opportunities or experiences (study abroad, international internships) available for this program.

ONET/SOC Codes: Career Options ⓘ

13-1161.00 Market Research Analyst13-1111.00 Business Analyst15-1243.01 Data Management Specialist
15-2031.00 Operations Research Analyst15-1242.00 Database Administrator (DBA)13-2099.01 Financial Quantitative Analyst
13-1161.01 SEO Specialist

Professional Licensure

NA

Additional Professional Licensure Information

Degree Search Contact Information and Support

Building Code

McCord Hall (MCRD)

Room Number

350

Program Email Address ⓘ

wpcareymasters@asu.edu

Program Office Telephone Number ⓘ

480-965-3332

Program Website Address

<https://wpcarey.asu.edu/masters-programs/business-analytics>

Keywords ⓘ

Business AnalystBusiness analytics

List New Keywords

Market Research Analyst

Select one (1) primary area of interest from the list below that applies to this program

Business

Select one (1) secondary area of interest from the list below that applies to this program

Program Assessment

Attach a PDF copy of the assessment plan printed from the University Office of Evaluation and Educational Effectiveness assessment portal demonstrating UOEEE's approval of your assessment plan for this program. ⓘ

- Busn Analytics MicroCert UOEEE Plan Approval[6].pdf

Supporting Documents

Additional Supporting Documentation (Impact statements should be above under Collaboration and Impact)

Please describe the attached files and their relevance to the proposal.

Dependencies

Dependencies

There are no dependencies

MCERT in Fundamentals of Business Analytics

BA-W.P. Carey School of Business

Mission

The Fundamentals of Business Analytics micro-certificate helps professionals in any industry advance by arming them with technical skills and problem-solving abilities to better leverage data for organizational growth. Through a series of three transformative courses led by top business faculty, students will build tools needed for advancement in a data-driven economy. Because this program is available internationally, the hands on certificate aligns with the W. P. Carey and ASU missions by equipping leaders across the globe with skills vital to thrive in a complex workforce.

Goals

Upon completion of this program, students will have skills needed to analyze and interpret complex data and apply machine learning models in order to make strategic business decisions, as well as forecast demand, optimize resources and communicate complex data insights. Those who earn this micro-certificate will be prepared for work in any industry where data-driven decisions making is key for innovation and growth.

Outcome 1

Students will transform complex data sets into useful information used to drive decision-making.

Concepts

Data analysis and interpretation; Advanced data visualization; Strategic business decision making

Competencies

Students will understanding how data flows across enterprise business processes; evaluate complex data management systems; Identify and understand the relationship between variables within a data set; Construct data models; Use visual analytics software and apply advanced techniques to represent data visually to a business audience.

Assessment Process

In CIS 505: Enterprise Analytics, students will demonstrate their applied knowledge of data management systems by constructing queries that provide evidence to respond to real-life business scenarios. The assignment will be assessed by the course instructor using a 5-pt rubric. In the final course of the micro-certificate, students will build a dashboard using a large and complex data set. Student work will be assessed by the instructor on understanding of

*Last Action: Sep 15 2025 02:01
Last User: Brennan Forss (mbbf3150)*

data and relationship between variables, usefulness of dashboard display, and ability to make decisions from dashboard. Results from these two direct measures will be shared with the course instructors, as well as relevant department and college leadership to identify opportunities for improvements to the program.

Measure 1

Performance Criterion 1

CIS 505: Enterprise Analytics, assignment assessed using a faculty developed rubric

80% or more of students of students in the course will earn 4 or higher on a 5-pt rubric

Measure 2

Performance Criterion 2

CIS 541: Business Data Visualization, project assessed using a faculty developed rubric

80% or more of students of students in the course will earn 4 or higher on a 5-pt rubric