USC University of Southern California

PROGRESSIVE MASTER'S DEGREE
PROGRAM COURSE PLAN

USC SCHOOL	Bovard College
ACADEMIC DEPARTMENT	
GRADUATE PROGRAM	Master of Science in Applied Analytics
POST CODE	2038
TERM EFFECTIVE DATE	Spring 2026

PROGRAM DESCRIPTION
A brief description of the graduate program.

The Master of Science in Applied Analytics (MSAA) program offers a unique and relevant opportunity to prepare professionals to advance their careers in the fields of analytics and artificial intelligence (AI). This applied learning program emphasizes the importance of a well-formulated business strategy for the appropriate use of analytics and AI to add value and contribute to business performance, providing students with the knowledge and skills needed to be effective leaders across industries. In addition to learning core concepts and mathematical and technical skills in analytics and AI, students will explore how to apply analytics methodologies and techniques to identify business opportunities and solve business problems.

Essential end-to-end processes of the analytics life cycle are examined and applied to real-world projects, including correctly identifying and framing business problems, acquiring and managing quality data, building analytical models, deploying the model to end users, and monitoring model performance. Students will explore practical topics that are increasingly important to analytics and AI professionals, including leadership, business acumen, data governance, data quality, ethical and responsible data usage, business strategy formulation, change management, project management, consumable data communication through visualization and storytelling, and effective communication to technical and nontechnical audiences and stakeholders.

COMMON BACHELOR DEGREE PROGRAM PATHWAYS
A list of common bachelor's degrees that undergraduate students pursue in advance of pursuing a progressive degree option with this graduate program. Some programs are restricted to certain majors while others are open to all students.

Open to all majors.

PREPARATORY UNDERGRADUATE COURSES
A list of courses at the undergraduate level that prepare students for the graduate program. Required coursework is listed first, followed by recommended courses. If not applicable, this section will be blank.

Dept. Prefix - Course #	Course Title	Required or Recommended	Units
	NONE		

UNDERGRADUATE COURSES USED TO REDUCE GRADUATE LEVEL UNITS

A list of undergraduate level courses that may be used to reduce the number of graduate level units required for the graduate program. If there are none, that is specified instead.

Dept. Prefix - Course #	Course Title	Units
	NONE	

CORE GRADUATE PROGRAM REQUIREMENTS (# units required)

A list of all required graduate courses for the graduate program. None of these courses may be used toward satisfying undergraduate degree requirements.

If special exceptions for any of these courses are made by the academic department, the course # is marked with an asterisk (*) and the exception is explained in the "Department Notes" section at the end of this course plan template.

Dept. Prefix - Course #	Course Title	Units
AAN 500	Applied Business Analytics and Artificial Intelligence	2
AAN 505	Statistics for Applied Data Analytics	2
AAN 510	Visualization and Storytelling With Data	2
AAN 515	Regression Modeling for Applied Predictive Analytics	2
AAN 520	Applied Data Management and Database Systems	2
AAN 525	Applied Machine Learning for Business Applications	2
AAN 530	Applied Optimization and Simulation	2
AAN 535	Analytics Business Strategy and Communication	2
AAN 540	Applications of Deep Learning and AI in Business	2
AAN 545	Project Management for Analytics Professionals	2
AAN 550	Applications in Artificial Intelligence	2
AAN 555	Applied Analytics and Artificial Intelligence Capstone	2

PRE-APPROVED ELECTIVE COURSEWORK

Elective coursework is approved at the discretion of the academic department. Note the following details about the total number and units required of elective coursework.

0	**TOTAL ELECTIVE COURSES REQUIRED FOR THE TRADITIONAL GRADUATE DEGREE**
0	**TOTAL ELECTIVE UNITS REQUIRED FOR THE TRADITIONAL GRADUATE DEGREE**

TOTAL UNIT COUNTS AND REQUIRED GRADUATE UNITS

24	**TOTAL UNITS REQUIRED FOR THE TRADITIONAL GRADUATE DEGREE**
0	**TOTAL GRADUATE UNITS THAT MAY BE WAIVED (IF ANY)**
24	**MINIMUM NUMBER OF GRADUATE UNITS THAT MUST BE AT THE 500 LEVEL OR ABOVE**

NOTES FROM THE DEPARTMENT

This section highlights any unique considerations, exceptions, or requirements for the graduate program. If a program has specific restrictions (courses, majors, etc.), they are detailed below.

- Students must complete all 24 units of the MSAA program. This is because our program is streamlined and does not have any electives.
- You may take between one course (2 units) per term and four courses (8 units) per term.
- Our program is year-round and therefore you may start in either Spring, Summer, or Fall semester. Please contact pdp@bovardcollege.usc.edu for application dates and deadlines.
- Note that our academic calendar dates differ slightly from the traditional USC calendar.
- All coursework is taught online. There is a 90-minute live Zoom class each week as well as asynchronous work through Canvas.
- Because this program is taught fully online, we are unfortunately unable to accept students who require an F-1 visa.

Name of Authorizing Master's Program Dean	**Date Approved**
Anthony Bailey	3/12/2026

Authorizing Dean's Title
Dean, USC Bovard College & Vice President for Global and Online Initiatives