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| <b>USC SCHOOL</b>          | Marshall School of Business                                |
| <b>ACADEMIC DEPARTMENT</b> | Data Science and Operations   Specialized Masters Programs |
| <b>GRADUATE PROGRAM</b>    | Master of Science in Business Analytics                    |
| <b>POST CODE</b>           | 1559   |
| <b>TERM EFFECTIVE DATE</b> | Fall 2025  |
| <b>HOW TO APPLY</b>        | <a href="#">Apply Here</a>                                 |

**PROGRAM DESCRIPTION**

A brief description of the graduate program.

The USC Marshall MSBA program is a data science STEM program with a business lens. It is one of the longest running MSBA programs in the nation, and top ranking in the world. The program emphasizes project-based learning in the classroom, so our students acquire deeper business analytics knowledge through active exploration of real-world business challenges and problems. These projects are in collaboration with our industry partners, and cover a range of business areas including finance, operations, marketing, management, supply chain, and HR.

The MSBA Progressive Degree Program begins in Fall semesters each year and requires at least two Fall semesters and one Spring semester of enrollment. This program is designed for students who are prepared to take 10.5 units of MSBA core coursework in their first Fall in the program. Fall core coursework is followed by enrollment in at least 6 units of core coursework in the student's first Spring. This program design sets students up for success not only in the academic sequencing of coursework, but in the co-curricular and career preparation aspects of graduate school. As such, preference is given to applicants who are near the completion of their bachelor's degree coursework. Admitted students who pass the waiver exams for statistics, SQL programming, and Python are approved to enroll in as few as 3 units of core coursework in their first Fall (see "Notes" section for more information).

**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 students from all undergraduate majors who have **completed** at least one college level statistics course per the below

**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 |
|-------------------------|---|-------------------------|-------|
|                         | At least one college level statistics course is required for admissions to this program. This course must be <b>completed</b> at the time of application. Applications submitted while a statistics course is still in-progress will not be considered. The statistics course can be taken at USC, taken as part of a USC-approved study abroad program, transferred to USC, or AP statistics if and only if college credit was granted. Some example courses at USC include, but are not limited to: | Required                |       |
| BUAD 310                | Applied Business Statistics   |                         | 4     |
| BUAD 312g               | Statistics and Data Science for Business  |                         | 4     |
| ECON 318                | Introduction to Econometrics  |                         | 4     |
| ISE 225                 | Engineering Statistics I  |                         | 3     |
| ITP 249                 | Introduction to Data Analytics  |                         | 4     |
| MATH 208                | Elementary Probability and Statistics   |                         | 4     |
| SSCI 381                | Statistics for Spatial Sciences   |                         | 4     |

**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 |
|---|---|-------|
| Undergraduate level courses may NOT be used to reduce the number of graduate level units required for the MSBA program. However, PDP students may have the opportunity to waive introductory graduate level coursework through waiver exams. See "Notes" section for more information.  |   |       |
| PDP students pursuing business undergraduate programs should avoid taking both classes when there is significant overlap between the undergraduate and graduate level courses. No waivers are granted for completion of this sort of coursework at the undergraduate level. Students in this situation can choose to take either the undergraduate (400-level) course towards their undergraduate degree, or the graduate (500-level) course towards their MSBA. See below for common courses with significant overlap: |   |       |
| DSO 427   | Spreadsheet Modeling for Business Insights (may overlap with DSO 547: Spreadsheet Modeling for Business Insights, 3 units)                            | 4     |
| DSO 428   | Essentials and Digital Frontiers of Big Data (may overlap with DSO 528: Blended Data Business Analytics for Efficient Decisions, 3 units)             | 4     |
| DSO 455   | Project Management (may overlap with DSO 580: Project Management, 3 units)  | 4     |
| DSO 464   | Deep Learning for AI and Business Applications (may overlap with DSO 569: Deep Learning for Business Applications, 1.5 units)                         | 4     |
| DSO 470   | Optimization with Analytics for Better Decision-Making (may overlap with DSO 570: The Analytics Edge: Data, Models, and Effective Decisions, 3 units) | 4     |

|         |  |   |
|---------|--|---|
| DSO 482 | Supply Chain Management (may overlap with DSO 581: Supply Chain Management, 3 units)                         | 4 |
| DSO 499 | Healthcare Analytics and Artificial Intelligence (may overlap with DSO 568: Healthcare Analytics, 1.5 units) | 4 |

**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 |
|-------------------------|---|-------|
| GSBA 542                | Communication for Management <b>(Fall 1 only)</b>                   | 1.5   |
| GSBA 545*               | Data Driven Decision Making <b>(Fall 1 only)</b>                    | 1.5   |
| DSO 510                 | Business Analytics <b>(Fall 1 only)</b>                             | 1.5   |
| DSO 552*                | SQL Databases for Business Analysts <b>(Fall 1 only)</b>            | 3     |
| DSO 576*                | Algorithmic Thinking with Python <b>(Fall 1 only)</b>               | 3     |
| DSO 545                 | Statistical Computing and Data Visualization <b>(Spring 1 only)</b> | 3     |
| DSO 530                 | Applied Modern Statistical Learning Methods <b>(Spring 1 only)</b>  | 3     |

**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.

|        |  |
|--------|--|
| Varies | <b>TOTAL ELECTIVE COURSES REQUIRED FOR THE TRADITIONAL GRADUATE DEGREE</b> |
| 16.5   | <b>TOTAL ELECTIVE UNITS REQUIRED FOR THE TRADITIONAL GRADUATE DEGREE</b>   |

**TOTAL UNIT COUNTS AND REQUIRED GRADUATE UNITS**

|    |  |
|----|--|
| 33 | <b>TOTAL UNITS REQUIRED FOR THE TRADITIONAL GRADUATE DEGREE</b>                |
| 3  | <b>TOTAL GRADUATE UNITS THAT MAY BE WAIVED (IF ANY)</b>                        |
| 30 | <b>MINIMUM NUMBER OF GRADUATE UNITS THAT MUST BE AT THE 500 LEVEL OR ABOVE</b> |

**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.

**Program Requirements**

The MSBA program starts in Fall semesters only. The degree requires at least two Fall semesters and one Spring semester. Students are expected to take 10.5 units of MSBA courses in their first Fall (GSBA 542, GSBA 545, DSO 510, DSO 552, and DSO 576), at least 6 units in their first Spring (DSO 545 and DSO 530), are recommended to pursue an internship in Summer, and must complete all required elective units. Admitted students who successfully pass the waiver exams for statistics (GSBA 545), SQL (DSO 552), and/or Python (DSO 576) can go below the required units for the first Fall term.

**Electives**

Please see the USC Catalogue for a list of our preapproved electives: <https://catalogue.usc.edu/>

As part of their electives, students must complete at least one course from a select list of electives whose topic focuses on the intersection of business, technology, and data. A precise list of qualifying classes will be provided as part of each elective registration cycle.

**Unit/Course Waivers\***

PDP students have the opportunity to waive introductory coursework and reduce their total unit requirement to a minimum of 30 units. This can be achieved by demonstrating mastery of introductory coursework through waiver exams. There are no further reductions below 30 units. Students that successfully pass multiple waiver exams and are eligible to waive more than 3 units of coursework must replace any excess units with electives to achieve a minimum of 30 units for the degree.

Waiver exams will be offered to admitted students before the start of classes for the following courses: **GSBA 545 (statistics), DSO 552 (SQL), and DSO 576 (Python)**

**\*\*Mandatory MSBA Program Fee of \$1,300 is charged in the first term of enrollment. This fee is used to support student events and activities throughout the three to four semesters that students are enrolled.\*\***

**Marshall Undergraduate Majors**

Marshall UG majors may be able to use up to 9 units of 500-level graduate electives taken as part of the MSBA program toward their Marshall MUDE units. You will have the opportunity to discuss this in detail with the graduate program advisor if your application is recommended for admission.

Rahsan Akbulut

12/11/2024

**Name of Authorizing Master's Program Dean**

**Date Approved**

Associate Dean for Specialized Masters Programs | Marshall School of Business

**Authorizing Dean's Title**