

# DATA ANALYTICS (MS)

**Program Director:** Fengmei Gong

Program Length: 10 - 24 Months

## Mission

The mission of the MS Data Analytics program is to provide students with a comprehensive understanding of business intelligence and the ability to analyze data and generate insights to address today's emerging management issues.

## Learning Goals

After completing the MS Data Analytics program, students will be able to:

1. Develop problem-solving and decision-making skills in a dynamic, changing environment.
2. Apply machine learning and statistical skills to build analytic models and uncover hidden patterns in data.
3. Effectively communicate data analyses concepts and results.
4. Demonstrate an understanding of big data technologies and data management techniques.
5. Evaluate ethical issues related to data and information.

## Degree Requirements

### Waivable Prerequisite Courses

0-3 semester hours

The prerequisite course a student must fulfill is determined by a review of the student's undergraduate coursework and professional experience. If a prerequisite course is needed, it should be among the first courses taken.

Code	Title	Semester Hours
MDA 500	Statistics and Linear Algebra	3
<b>Total Semester Hours</b>		<b>3</b>

**Total Program: 36 semester hours**

### Core Courses

21 semester hours

Code	Title	Semester Hours
BUS 510	Management of Information Technology	3
BUS 512	Integrated Data Management	3
MDA 501	SAS Programming Essentials	3
MDA 502	Multivariate Statistical Analysis	3
MDA 503	Data Mining and Predictive Analytics I	3
MDA 504	Data Mining and Predictive Analytics II	3
MDA 580	Analytics Graduate Seminar (Culminating Activity)	3
<b>Total Semester Hours</b>		<b>21</b>

### Concentration/Track

15 semester hours

Students in this program must select one of the available concentrations or the customized track option.

#### Marketing Analytics Concentration

Code	Title	Semester Hours
BUS 560	Seminar in Marketing Management	3
MDA 564	Marketing Research Methods	3
MDA 565	Digital Marketing and Social Media Analytics	3
MDA 568	Experimental Design and Analysis in Consumer Behavior	3
MDA 569	Marketing Analytics	3
<b>Total Semester Hours</b>		<b>15</b>

#### Supply Chain Analytics Concentration

Code	Title	Semester Hours
BUS 575	Analysis of Business Operations	3
BUS 576	Supply Chain Management & Strategy	3
MDA 572	Problem Solving Methodologies	3
MDA 573	Analytics in Operations and Planning	3
MDA 579	Analytics in Logistics and Sourcing	3
<b>Total Semester Hours</b>		<b>15</b>

#### Customized Track Option

This option is designed to allow students flexibility to choose any combination of the courses that make up the Marketing Analytics and Supply Chain Concentrations. Students must satisfy any prerequisites for the classes they choose as part of this option.

Code	Title	Semester Hours
Select five of the following:		15
BUS 560	Seminar in Marketing Management	
BUS 575	Analysis of Business Operations	
BUS 576	Supply Chain Management & Strategy	
MDA 564	Marketing Research Methods	
MDA 565	Digital Marketing and Social Media Analytics	
MDA 568	Experimental Design and Analysis in Consumer Behavior	
MDA 569	Marketing Analytics	
MDA 572	Problem Solving Methodologies	
MDA 573	Analytics in Operations and Planning	
MDA 579	Analytics in Logistics and Sourcing	
<b>Total Semester Hours</b>		<b>15</b>

## Masters in Data Analytics 4+1 Program

Open to undergraduate students in the College of Business as well as Computer Science majors, the Masters in Data Analytics 4+1 Program provides students with a comprehensive understanding of business intelligence and the ability to analyze data and generate insights for better decision-making in the modern business world. During the senior year, undergraduate students approved for this MSDA 4+1 Program will begin taking graduate MSDA courses, which will count toward both degrees, thereby providing an accelerated path to completion.

**Minimum Requirements to Apply to Participate in the MSDA 4+1 Program:**

1. Must be a current full-time undergraduate student at the University of La Verne.
2. GPA 2.5 overall and in the major.
3. Students must have completed a minimum of 88 units by the end of the junior year.
4. Students must complete the "Application for Graduation Process" for the bachelor's undergraduate degree (between April-May).

**MSDA Courses in Senior Undergraduate Year:**

1. Once accepted to the Program, it is expected students will register to attend both the Fall and Spring of their senior year as full-time students with a maximum of two MSDA courses each semester.
2. Students may take the remaining GE and major requirements concurrently during this senior year.
3. Students must maintain a 3.0 GPA in the courses intended to be used for the MSDA graduate degree.
4. No undergraduate courses may be used to satisfy MSDA graduate-level courses.
5. If students complete Statistics (e.g., BUS 270 Statistics or a substantially equivalent course) and Linear Algebra (e.g., MATH 320 Linear Algebra or a substantially equivalent course) with grades of C+ or better, MDA 500 Statistics and Linear Algebra can be waived.
6. A maximum of 15 units of MSDA courses (3 units each) can be taken in the senior year, with a maximum of 9 units in each semester.
7. MSDA course options during the senior year may include a maximum of 5 MSDA courses and may be applied to the bachelor's undergraduate degree. See program chair for options.