## DECISION ANALYTICS, MASTER OF (M.D.A.) WITH A CONCENTRATION IN ACCOUNTING ANALYTICS

#### Program accreditation

Association to Advance Collegiate Schools of Business (http://www.aacsb.edu/)

#### **Program goal**

The Master of Decision Analytics provides students with knowledge of the statistical, mathematical and scientific skills and experience necessary to utilize advanced methods of data analysis for business decision-making.

#### **Student learning goals**

Students will be able to examine a situation/problem to determine a relevant data-driven analysis to provide valuable information for decision makers and apply advanced analytical and quantitative skills to the decision problems of businesses, organizations and society. Students will be able to communicate analysis information and recommended decisions in a clear, ethical and transparent manner.

# Student learning outcomes Master of Decision Analytics core outcomes

- Database structures and query: Students will have an understanding of basic database structures, be able to query databases and organize data for analysis.
- 2. **Quantitative skills:** Students will be able to identify appropriate data analysis approaches to address real-world problems. They will be able to perform the analysis using commercial software.
- 3. Problem formulation: Students will have the knowledge, skills and practice to take nonquantitative and perhaps ill-formed problems and issues and determine ways objective analysis can bring organization and insight to them. They will be able to determine data requirements and guery available databases.
- 4. **Analytics applications:** Students will experience various applications of analytics in real situations.
- 5. Technical communications and teamwork: Students will be able to communicate analytical analysis and results effectively to nonquantitative audiences, and will develop skills in organizing, interacting and analyzing real problems as members of a team.

#### Accounting analytics concentration-specific outcome

 Accounting insights: Students will be able to analyze, present and interpret accounting data in a manner that facilitates decision-making in accounting settings.

## VCU Graduate Bulletin, VCU Graduate School and general academic policies and regulations for all graduate students in all graduate programs

The VCU Graduate Bulletin website documents the official admission and academic rules and regulations that govern graduate education for all

graduate programs at the university. These policies are established by the graduate faculty of the university through their elected representatives to the University Graduate Council.

It is the responsibility of all graduate students, both on- and off-campus, to be familiar with the VCU Graduate Bulletin as well as the **Graduate**School website and academic regulations in individual school and department publications and on program websites. However, in all cases, the official policies and procedures of the University Graduate Council, as published on the VCU Graduate Bulletin and Graduate School websites, take precedence over individual program policies and guidelines.

Visit the academic regulations section for additional information on academic regulations for graduate students.

#### Degree candidacy requirements

A graduate student admitted to a program or concentration requiring a final research project, work of art, thesis or dissertation, must qualify for continuing master's or doctoral status according to the degree candidacy requirements of the student's graduate program. Admission to degree candidacy, if applicable, is a formal statement by the graduate student's faculty regarding the student's academic achievements and the student's readiness to proceed to the final research phase of the degree program.

Graduate students and program directors should refer to the following degree candidacy policy as published in the VCU Graduate Bulletin for complete information and instructions.

Visit the academic regulations section for additional information on degree candidacy requirements.

#### **Graduation requirements**

As graduate students approach the end of their academic programs and the final semester of matriculation, they must make formal application to graduate. No degrees will be conferred until the application to graduate has been finalized.

Graduate students and program directors should refer to the following graduation requirements as published in the Graduate Bulletin for a complete list of instructions and a graduation checklist.

Visit the academic regulations section for additional information on graduation requirements.

#### Other information

School of Business **policies and procedures for graduate students** are available on the school's website.

Apply online today. (https://www.vcu.edu/admissions/apply/graduate/)

### **Admission requirements**

| Degree: | Semester(s) of entry: | Deadline dates: | Test requirements: |
|---------|-----------------------|-----------------|--------------------|
| M.D.A.  | Fall                  | Jul 1           |                    |
|         | Spring                | Nov 1           |                    |
|         | Summer                | Mar 1           |                    |

In addition to the general admission requirements of the VCU Graduate School (http://bulletin.vcu.edu/graduate/study/admission-graduate-study/admission-requirements/), applicants must submit an up-to-date resume.

International applicants may be required to submit an approved English proficiency score and/or course-by-course international transcript evaluation.

All applicants may opt to submit a GMAT or GRE score for consideration. Additional information can be found on the Graduate Studies in Business webpage (https://business.vcu.edu/prospective-students/graduate/admissions/#sob-content-1801062).

#### **Degree requirements**

The decision analytics degree provides students with knowledge of quantitative skills and experience in analyzing problems and using data for decision-making in a business environment. Depending upon individual student interests and adviser approval, the required nucleus is supplemented with relevant elective courses from within the School of Business or from outside departments.

In addition to the VCU Graduate School graduation requirements (http://bulletin.vcu.edu/academic-regs/grad/graduation-info/):

- All students must have completed a course in calculus. Students must also be proficient at an intermediate level with a spreadsheet. These prerequisites can be met after admission to the program.
- 2. At the time of application, all undergraduate and graduate transcripts will be reviewed to determine if the following prerequisite courses and/or foundation course may be waived. A waiver may be awarded when a student demonstrates equivalent knowledge, such as completing the required undergraduate equivalent course to the satisfaction of the admission committee.

# Prerequisite undergraduate and/or foundation courses

Prerequisite and/or foundation courses may be waived for students who present satisfactory equivalent preparation at either the undergraduate or graduate level. This determination is made by the faculty adviser at the time of admission.

| Course                             | Title   | Hours |  |  |
|------------------------------------|---|-------|--|--|
| Prerequisite undergraduate courses |   |       |  |  |
| SCMA 212                           | Differential Calculus and Optimization for Business | 3     |  |  |
| or MATH 200                        | Calculus with Analytic Geometry I                   |       |  |  |
| SCMA 301                           | Business Statistics I                               | 3     |  |  |
| Foundation course                  |   |       |  |  |
| SCMA 524                           | Statistical Fundamentals for Business<br>Management | 3     |  |  |

### **Curriculum requirements**

| Course                | Title                             | Hours |  |  |
|-----------------------|-----------------------------------|-------|--|--|
| Required core courses |                                   |       |  |  |
| INFO 601              | Database Management               | 3     |  |  |
| INFO 645              | Prescriptive Analytics            | 3     |  |  |
| INFO 648              | Business Data Analytics           | 3     |  |  |
| SCMA 632              | Statistical Analysis and Modeling | 3     |  |  |
| SCMA 642              | Decision and Risk Analytics       | 3     |  |  |
| Concentration courses |                                   |       |  |  |
| ACCT 507              | Fundamentals of Accounting        | 3     |  |  |
|                       |                                   |       |  |  |

| ACCT 608                | Managerial Accounting Concepts                                  | 3 |
|-------------------------|---|---|
| ACCT 608<br>ACCT 621    | Accounting Analytics  | 3 |
| Approved electives      | Accounting Analytics  | J |
| Select six credits from | the following:  | 6 |
| ACCT 620                | Accounting Research   | U |
| ECON 501                | Introduction to Econometrics                                    |   |
| ECON 612                | Fconometrics  |   |
| ECON 614                | Mathematical Economics  |   |
| ECON 641                |   |   |
| ECON 641                | Econometric Time-series Analysis Panel and Nonlinear Methods in |   |
| LCON 042                | Econometrics  |   |
| FIRE 520                | Financial Concepts of Management                                |   |
| FIRE 540                | Financial Analytics   |   |
| FIRE 610                | Financial Modeling and Analysis                                 |   |
| FIRE 615                | Foundations in Real Estate                                      |   |
| FIRE 621                | Cases in Financial Management                                   |   |
| FIRE 622                | Financial Intermediation and Analysis                           |   |
|                         | of Fixed-income Securities                                      |   |
| FIRE 623                | Financial Management  |   |
| FIRE 626                | Risk Management   |   |
| FIRE 627                | Real Estate Development   |   |
| FIRE 629                | Cases in Real Estate  |   |
| FIRE 630                | Real Estate Valuation   |   |
| FIRE 635                | Investments and Security Analysis                               |   |
| FIRE 650                | Derivatives   |   |
| FIRE 658                | Real Estate Finance and Investments                             |   |
| INFO 602                | Big Data Analytics with Cloud Platforms                         |   |
| INFO 611                | <b>3 ,</b>  |   |
| INFO 617                | Text Analytics  |   |
| INFO 620                |   |   |
| INFO 632                |   |   |
| INFO 635                |   |   |
| INFO 636                | Securing Cloud Infrastructure                                   |   |
| INFO 637                |   |   |
| INFO 644                |   |   |
| INFO 646                | Security Policy Formulation and                                 |   |
|                         | Implementation  |   |
| INFO 658                | Securing the Internet of Things                                 |   |
| INFO 664                | Information Systems for Business                                |   |
|                         | Intelligence  |   |
| MGMT 642                | Business Policy and Strategy                                    |   |
| MGMT 655                | Entrepreneurship  |   |
| MGMT 657                | Corporate Entrepreneurship                                      |   |
| MKTG 671                | Marketing Management  |   |
| MKTG 675                | Digital Marketing   |   |
| MKTG 676                | Social Media Research   |   |
| MKTG 678                | Marketing Analytics   |   |
| MKTG 679                | Brand Strategy  |   |
| SCMA 602                | Global Supply Chain Management                                  |   |
| SCMA 603                | SAP ERP and Supply Chain<br>Management                          |   |
| SCMA 606                | Supply Chain Innovation   |   |
| SCMA 615                | Strategic Logistics Management                                  |   |
|                         | -   |   |

The minimum number of graduate credit hours required for this degree is 30.

#### Contact

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#### **Additional contact**

Graduate Studies in Business gsib@vcu.edu (804) 828-4622

**Program website:** business.vcu.edu/academics/supply-chain-management-and-analytics/master-of-decision-analytics-evening-format/ (http://business.vcu.edu/academics/supply-chain-management-and-analytics/master-of-decision-analytics-evening-format/)