BUSINESS, MASTER OF SCIENCE (M.S.) WITH A CONCENTRATION IN DECISION ANALYTICS

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

Note: Contact the Graduate Studies in Business office at gsib@vcu.edu or (804) 828-4622 for admission information about this program.

Program goal
The Master of Science in Business with a concentration in 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 outcomes
1. After examining a situation/problem, students will be able to develop appropriate hypotheses along with a method for testing them and be able to draw logical conclusions and make reasonable decisions based on available information.
2. Students will be able to apply quantitative procedures to obtain solutions for real-world problems.
3. Students will be able to appropriately address the target audience, use proper organization, create clear graphical displays and express ideas with clarity and grammatical correctness.
4. Students will be able to show a clear understanding of the ethical nature of the issue and recommend appropriate action.

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 (http://www.graduate.vcu.edu) 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.

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 Graduate study section for additional information on degree candidacy requirements. (http://bulletin.vcu.edu/graduate/study/general-academic-regulations-graduate-students/degree-candidacy)

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 Graduate study section for additional information on graduation requirements. (http://bulletin.vcu.edu/graduate/study/general-academic-regulations-graduate-students/graduation-requirements)

Other information
School of Business policies and procedures for graduate master’s degree students are available on the school’s website at business.vcu.edu/graduate-studies/current-graduate-students (http://business.vcu.edu/graduate-studies/current-graduate-students).

Note: Contact the Graduate Studies in Business office at gsib@vcu.edu or (804) 828-4622 for admission information into this program.

Admission requirements

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

Visit the Graduate study section for additional information on academic regulations for graduate students. (http://bulletin.vcu.edu/graduate/study/general-academic-regulations-graduate-students)
Note: Contact the Graduate Studies in Business office at gsib@vcu.edu or (804) 828-4622 for admission information into this program.

Degree requirements

The concentration in decision analytics 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/graduate/study/general-academic-regulations-graduate-students/graduation-requirements):

1. All students must have completed a course in calculus prior to attempting graduate business courses. This prerequisite can be met after admission to the program.
2. Students must complete up to four classes (zero to 12 credit hours) of foundation course work. At the time of application, all undergraduate and graduate transcripts will be reviewed to determine if the following courses may be waived. Waiver of a foundation course may be awarded when a student demonstrates equivalent knowledge, such as completing the required undergraduate equivalent course with minimum grade of C.

Curriculum requirements

Prerequisite

Calculus
SCMA 212 Differential Calculus and Optimization for Business 3
or SCMA 500 Quantitative Foundation for Decision-making

Foundation courses

SCMA 524 Statistical Fundamentals for Business Management 3

Select three of the following: 9
ACCT 507 Fundamentals of Accounting
ECON 500 Concepts in Economics
FIRE 520 Financial Concepts of Management
INFO 364 Database Systems
MGMT 540 Management Theory and Practice
MKTG 570 Concepts and Issues in Marketing
SCMA 530 Fundamentals of the Legal Environment of Business

Required core courses

INFO 664 Information Systems for Business Intelligence 3
SCMA 632 Statistical Analysis and Modeling 3
SCMA 645 Management Science 3

Additional requirements

Select three of the following: 9
INFO 610 Analysis and Design of Database Systems

Approved electives

Select four of the following: 12
ACCT 608 Managerial Accounting Concepts
ECON 501 Introduction to Econometrics
ECON 610 Managerial Economics
ECON 612 Econometrics
FIRE 629 Real Estate Investment Analysis
FIRE 635 Investments and Security Analysis
INFO 611 Data Re-engineering
INFO 616 Data Warehousing
MGMT 642 Business Policy and Strategy
MGMT 697 Guided Study in Management
MKTG 673 Marketing Research
OPER 528 Stochastic Simulation
OPER/STAT 636 Machine Learning Algorithms
OPER 643 Decision and Risk Analysis
SCMA 675 Operations Management

Total Hours 45

Total graduate credit hours required (minimum) 45 (30 if prerequisite and all foundation courses are waived)

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Program website: business.vcu.edu/graduate/dsba.html (http://business.vcu.edu/graduate/dsba.html)