

DECISION ANALYTICS, MASTER OF (M.D.A.) – WEEKEND PROGRAM

Program accreditation

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

Program goal

The VCU Master of Decision Analytics weekend program provides students with the ability to evaluate situations, employ data-driven analysis and offer valuable insights to decision makers. Students will cover advanced analytics topics including big data, machine learning and artificial intelligence. They will also become proficient in presenting their analyses and recommendations in a clear, ethical and transparent manner. Students join a diverse cohort of working professionals who share their passion for analytics, providing an enriching learning experience and career network.

The weekend program is presented in a concentrated weekend schedule, ensuring the program is attractive to mid-career professionals who want to gain or increase their analytics skills without interrupting their careers.

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

1. **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 query 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.

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 | Feb 15 (early decision) | |
| | | Apr 15 (round two) | |
| | | Jun 15 (round three) | |

In addition to the general admission requirements of the VCU Graduate School (<https://bulletin.vcu.edu/graduate/study/admission-graduate->

study/admission-requirements/), applicants should have two years of professional work experience and an introductory knowledge of statistics. Students who do not meet the statistics requirement can fulfill it with a 20-hour online course provided by the program. It is preferable that students have some programming experience. Exceptions may be made at the discretion of the program director. No GMAT or GRE score is required.

Degree requirements

In addition to the VCU Graduate School graduation requirements (<https://bulletin.vcu.edu/academic-regs/grad/graduation-info/>), students must complete the required 33-credit hour Decision Analytics, Master of (M.D.A.) - weekend track curriculum.

Curriculum requirements

| Course | Title | Hours |
|--------------------|---|-----------|
| Courses | | |
| DAPT 611 | Analysis and Design of Database Systems | 2 |
| DAPT 612 | Natural Language Processing and AI for Unstructured Data | 2 |
| DAPT 613 | Tools for Business Intelligence | 1 |
| DAPT 614 | Advanced SQL | 1 |
| DAPT 615 | Emerging Technologies | 1 |
| DAPT 617 | Analytics Computing I | 1 |
| DAPT 618 | Analytics Computing II | 1 |
| DAPT 619 | Analytics Computing III | 1 |
| DAPT 620 | Machine Learning | 1 |
| DAPT 621 | Statistics for the World of Big Data | 2 |
| DAPT 622 | Statistics for the World of Big Data II | 2 |
| DAPT 630 | AI Foundations | 1 |
| DAPT 631 | Data Mining | 2 |
| DAPT 632 | Forecasting Methods and Applications for Managerial Decision-making | 2 |
| DAPT 633 | Introduction to Marketing and Customer Analytics | 1 |
| DAPT 641 | Introduction to Simulation Methods | 1 |
| DAPT 642 | Decision and Risk Analysis | 1 |
| DAPT 643 | Introduction to Optimization Models | 1 |
| DAPT 651 | Personal, Interpersonal and Organizational Awareness | 1 |
| DAPT 652 | Professional Presentations: Strategy, Delivery and Technology | 1 |
| DAPT 653 | Team Dynamics in Analytics | 1 |
| DAPT 661 | Cases in Analytics | 1 |
| DAPT 670 | Analytics Problem Formation | 1 |
| DAPT 681 | Analytics Practicum I | 2 |
| DAPT 682 | Analytics Practicum II | 2 |
| Total Hours | | 33 |

The minimum total of graduate credit hours required for this degree is 33.

There are no electives, substitutions or exemptions.

Students who complete the requirements for this degree will receive a Master of Decision Analytics.

Contact

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Program website: business.vcu.edu/graduate-programs/decision-analytics-professional-track/ (<https://business.vcu.edu/graduate-programs/decision-analytics-professional-track/>)