## MS in Data and Information Management

## **About Our Program**

## Why Choose Our Program?

As the volume of information continues to explode, so does the need for IT professionals who can maximize the value of information assets while getting the right data to the right people at the right time. The Radford University MS in Data and Information Management combines traditional classroom learning with practical experience, resulting in a curriculum that challenges students to solve real problems for real clients. Class discussions build a strong theoretical foundation reinforced with hands-on projects enabling students to engage with faculty and industry partners in the ARTIS lab, an advanced, high-tech collaborative workspace. By blending theory and practice, students master the latest technology – including Hadoop, Spark, and Hive – and learn fundamental concepts and principles in the following areas:

- Data architecture; data modeling and design; data storage
- Data integration and interoperability; data quality
- Data governance; data security and privacy
- Data warehousing and business intelligence.

The MS program educates graduates to the advanced level required to deliver increasingly complex data management solutions while preparing them for successful and rewarding careers. Students gain the knowledge and experience they need to attain leadership roles at multiple levels from database engineers and administrators to data architects and information managers. Graduates will be proficient with tools and techniques for managing traditional data as well as the latest technology and best practices to manage and process big data. Graduates will also be prepared to meet the challenges of designing, developing, and maintaining high-performance systems with 24/7 availability.

Faculty
[Insert faculty bios]

Frequently Asked Questions

## **APPLICATION** (General)

## How will my application be evaluated?

In our review of your application, we will look for evidence of excellent knowledge of the field, high academic ability, a strong work ethic, and other factors that illustrate your potential. Academic and professional accomplishments, as well as reference letters and test scores, will help us evaluate your potential for success in the program.

## What is the "additional coursework" required to resolve undergraduate coursework deficiencies?

Prerequisite coursework is required in database management systems, data structures, and algorithms. Please contact the department to discuss whether specific courses satisfy these requirements.

## Can I apply to the program before having resolved undergraduate coursework deficiencies?

Yes; however, if you are accepted, you must resolve the deficiency before starting the program.

## Where do I send my application?

Applications are submitted entirely online. Please visit the <u>Application</u> page of the College of Graduate and Professional Studies to begin your application.

## Can I schedule an appointment to talk with someone about the program?

Yes. Please call 540-831-5381 to set up an appointment.

## **APPLICATION** (Work Experience)

## What is the desired amount of work experience you wish to see in a candidate?

No specific amount of work experience is expected. Work experience in IT is one way to demonstrate potential for success.

## **APPLICATION** (References)

## Who should I ask to write my reference letters?

We accept reference letters from faculty members who are familiar with your academic performance in major coursework or from colleagues or supervisors who are familiar with your work.

## What steps do my references need to follow?

Instructions regarding the submission of reference letters can be found on the <u>Application</u> page of the College of Graduate and Professional Studies.

#### Is the reference letter deadline the same as the application deadline?

Yes. Your application will not be considered complete until all required materials, including reference letters, have been received.

## APPLICATION (Follow-up)

## Who should I contact if I have a question regarding my application status?

First, visit the MyRU application portal to check the status of your materials. This is the website you used to submit your application. Any additional questions should be directed to the graduate

admissions manager, who can be reached by phone at 540-831-5431 or email at gradcollege@radford.edu.

## When and how can I expect to hear back from RU?

A letter of admission or denial will be sent to you.

## Can I defer my acceptance?

Yes, with approval from the department.

#### **GRE & TOEFL**

## What is the latest date test scores will be accepted?

Test scores must be submitted on or before the application deadline. An application will not be considered complete until all required materials, including test scores, have been received.

## Should I send only my best GRE/TOEFL score?

Please send all scores to provide the most complete view of your academic record.

#### INTERNATIONAL APPLICANTS

## What are the additional admission requirements for international students?

International applicants whose native language is not English must achieve an acceptable score on the TOEFL examination and submit an approved credential report for coursework completed outside the United States.

Satisfactory TOEFL scores are as follows: 87 for the online test; or 227 or 567, respectively, for the computer-based or paper-based tests.

#### TRANSCRIPTS

## How should I submit my transcripts?

Instructions regarding the submission of transcripts can be found on the <u>Application</u> page of the College of Graduate and Professional Studies.

## Is there a minimum GPA requirement to apply?

Yes. The minimum GPA requirement is 3.0.

#### FINANCIAL AID

# What is the estimated cost for one year in RU's Data and Information Management program?

Please visit the <u>RU Student Accounts</u> page for information on tuition and fees.

## What are some options for financing my RU education?

Graduate assistantships are available to full-time degree-seeking students through the Graduate College for both entering and returning students. In addition to awards based on demonstrated financial need, scholarships based on leadership, character and academic achievements are offered at Radford.

#### **ACADEMICS**

## What kind of academic environment should I expect?

Coursework will provide a rigorous study of theory in support of practical application of current data management methods to solve real-world problems using state-of-the-art technology and facilities. Class sizes are small, and students regularly collaborate on projects, resulting in a tightknit community of both faculty and students.

#### How is the curriculum structured?

The Data and Information Management curriculum encompasses database administration; data warehousing; data mining; and algorithms for efficiently analyzing, searching, retrieving, and transforming large data sets. Courses blend theory and practice to teach traditional data management methods as well as the latest technology and techniques for managing and processing big data. Visit the RU DAIM Curriculum page for more information.

## **CAMPUS VISITS**

## How can I sign up for a campus tour?

Please visit the College of Graduate and Professional Studies to sign up for a campus tour.

How can I sign up for a classroom visit and is there a limit to how many I can attend? Please call 540-831-5381 to set up a classroom visit. There is no limit to how many you can attend.

#### Admissions

## Admissions

Apply now to begin your RU DAIM journey at Radford University! All applications require payment of a non-refundable fee (\$50). If you prefer a mailed application packet, please email a request or call us at 540-831-5431. All applicants must submit official transcripts from all colleges and universities attended.

Applicant files are forwarded to the appropriate department for evaluation and a recommendation regarding admission. The final decision on admission rests with the dean of the College of Graduate and Professional Studies.

## Admission Requirements

• Scores of 152 on the quantitative portion and 148 on the verbal portion of the Graduate Record Exam, or scores of 650 and 420, respectively, under the old scoring system.

- A minimum grade point average of 3.0 overall from an accredited educational institution.
- Three letters of reference from faculty members who are familiar with your academic performance in major coursework or from colleagues or supervisors who are familiar with your work.
- An undergraduate course in Database Management Systems. Deficiencies in this area may be resolved through additional coursework that must be completed before the start of the program.
- Completion of the Radford University graduate application.
- Verification of required immunizations.
- International applicants whose native language is not English must achieve an acceptable score on the TOEFL examination and submit an approved credential report for coursework completed outside the United States. Criteria for satisfactory TOEFL scores are as follows: 87 for the online test; or scores of 227 or 567, respectively, for the computer-based or paper-based tests.

#### Academics

#### Overview

#### Academics

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## Course Offerings

[Insert course descriptions]

## Curriculum

The Data and Information Management curriculum encompasses database administration; data warehousing; data mining; and algorithms for efficiently analyzing, searching, retrieving, and transforming large data sets. Courses blend theory and practice to teach traditional data management methods as well as the latest technology and techniques for managing and processing big data.

The main sequence of courses is shown in Figure 1. In addition to the courses shown below, students must complete six hours of thesis, project work, or approved graduate courses.

## [Insert course sequence figure]

## **Experiential Opportunities**

#### Consortium

The Applied Research Center (ARC) at Radford University is a consortium that brings together students, faculty, and regional industry partners to explore emerging enterprise technologies. The ARC enables students to apply their skills and knowledge to solve industry problems while developing a strong network of industry contacts. This unique environment gives students the practical, hands-on experience they need to become data architects, information managers, and senior database administrators.

### For students:

Not only do students learn emerging technologies in the field with practical, hands-on learning methods, they develop a strong network of industry contacts.

#### For corporate partners:

With rapid prototyping and evaluation of emerging technologies, corporate partners address their business challenges head-on and stay current to the newest developments in big data. They also get the opportunity to recruit and connect to some of the industry's next top tech talents.

## ARTIS Lab

In the Applied Research in Technology and Information Science (ARTIS) Lab, an advanced, high-tech collaborative workspace, students work closely with faculty and industry partners to solve real problems. Projects typically involve:

- Rapid prototyping and evaluation of emerging technologies to assess scalability, performance, security, and resilience for enterprise-class systems.
- Practical, hands-on assessment of feasibility and cost benefit of emerging technology based on business needs.

#### Contact Us

Are you curious about RU DAIM? Please feel free to contact us with any questions. We would love to hear from you!

Call the Department of Information Technology at 540-831-5381.