

STEM MBA: A GUIDE FOR RECRUITERS ON THE NEW GOLD STANDARD IN BUSINESS EDUCATION

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Using data for smarter, evidence-based decision-making can help improve the performance and efficiency of functions across organizations. To fully realize the potential of data, however, companies need managers with both the technical skills to understand and analyze data, and the leadership capabilities to drive the changes they infer.

Read this white paper for a primer on what recruiters and hiring managers need to know about STEM-designated MBAs, and how candidates with this special degree can help your organization thrive in today's data-driven world.



SIMON
BUSINESS SCHOOL
UNIVERSITY of ROCHESTER

245 Gleason Hall
Rochester, NY 14627
(585) 275-4881
simon.rochester.edu

For more information:
career@simon.rochester.edu

Now Hiring: Managers Who Can Lead in a Data-Driven Business Environment

“. . . because of big data, managers can measure, and hence know, radically more about their businesses, and directly translate that knowledge into improved decision making and performance.”ⁱ

Big Data, Big Opportunity for Businesses

The amount of information in the world is growing at a staggering rate—an article published by *The Economist* estimates the amount of data being generated by computers, cameras, mobile devices, and the like is increasing at a compound annual rate of 60 percent.ⁱⁱ

The consequences of this explosion of digital data for businesses has been studied and written about for years. A *Harvard Business Review* article sums up the opportunity: “Simply put, because of big data, managers can measure, and hence know, radically more about their businesses, and directly translate that knowledge into improved decision making and performance.”

Indeed, it’s well known that evidence-based decision-making can help improve performance and efficiency across an organization—from product development to marketing, sales to operations, finance to HR. As a result, recruiters and hiring managers of companies of every size, from start-ups to multinational enterprises, are looking to fill leadership roles with individuals who possess the skill sets needed to capitalize on this opportunity.

Andy Smith, vice president and campus recruiting team manager at M&T Bank, is one such corporate recruiter. He says, “When I think

about data—and being in financial services, there’s a great deal of it—I think about, ‘How can we leverage it? How can we use it to better serve our customers?’ To do that, we need folks who know what to do with that data.”

Leaders of STEM Teams

At the same time, there’s a growing need for managers of businesses in STEM (Science, Technology, Engineering, and Mathematics) fields. According to the US Department of Labor (DOL), there were 8.6 million STEM jobs in 2015, spanning categories such as software development, analytics and data science, engineering, and life and physical science.ⁱⁱⁱ

With the rise of STEM jobs comes a growing need for managers to lead teams working in these fields. Engineers, for instance, need managers who not only are effective leaders and have a strong business foundation, but who also can “speak the same language” as the workers they are managing. The DOL predicts growth both in the number of available STEM jobs and the number of positions for those managing them—the DOL forecasts nearly 200,000 job openings in STEM management roles by 2024.

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STEM MBAs Shape a New Class of Leaders

While many companies have lofty plans for capitalizing on the wealth of data available to them—85 percent of firms aspire to be data-driven, according to a 2017 survey^{iv}—most industries are “nowhere close to realizing the potential of analytics,” argues another *Harvard Business Review* article.^v The reason for the gap? In many cases, it seems to be a lack of acceptance that insights derived from analytics require real change within the organization to be effective.

Enter leaders with the quantitative *and* managerial skills needed to leverage data and analytics to their full potential. While degrees with STEM designation indicate that a graduate has this desired skill set, the only master of business administration (MBA) programs—traditionally the gold standard in business education—designated as STEM were, until recently, either specialty degrees or available only to students concentrating on a specific area, such as supply chain management.

But in August 2018, the University of Rochester’s Simon Business School became the first and only US MBA program with an option for STEM designation regardless of a student’s specialization. Simon students can choose any one of the school’s 10 specializations—banking, asset management, venture capital & private

equity, corporate finance, brand management, product management, strategy, pricing, technology, and operations—and still graduate with a STEM-designated MBA.

Long known for its focus on quantitative analysis and economic frameworks, the Simon School’s MBA program is rigorous both in the technical skills to analyze and interpret data and the management capabilities to successfully communicate and implement the organizational changes they infer. In addition to its new STEM MBA option, Simon offers four master of science (MS) programs designated as STEM—MS in Finance, MS in Accountancy, MS in Marketing Analytics, and MS in Business Analytics.

Benefits for Companies

The curriculum of a STEM MBA prepares candidates with a skill set highly sought in top MBA talent—skilled leaders who have expertise in using data to solve ambiguous and complex business problems. The Simon School’s STEM-designated MBA option, for example, provides students with rigorous training in areas such as data analytics, business modeling, information systems for management, and managerial economics—concepts that are critical for managers to understand in today’s data-driven business landscape.

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Recruiters can expect candidates with a STEM-designated MBA to arrive on the job with analytical tools that can positively impact their company’s bottom line, plus the ability to manage globally diverse teams in a variety of fields.

Extended OPT for International Talent

Both MBA and MS programs designated as STEM offer an additional benefit for companies looking to hire international students in STEM-related roles. In 2008, the federal government expanded the Optional Practical Training (OPT) program to grant international students with STEM-designated degrees the option to stay and work in the US for up to three years in a role directly related to their STEM degree. (For non-STEM-designated degrees, international students are eligible for only 12 months of OPT.) These extra 24 months give companies more time to employ top international talent and assess their performance for possible H1B sponsorship, and also allow for more chances at the visa lottery.

The Bottom Line

By hiring candidates with a STEM-designated MBA, corporate recruiters and hiring managers can be sure they’re bringing on talent who are among the world’s best. You can expect graduates of a STEM MBA program to not only possess the traits of a traditional MBA—strong leadership and interpersonal skills, etc.—but

also have the analytical and quantitative skills needed to make evidence-based strategic decisions to help improve organizational performance and efficiency. In short: When you hire a STEM MBA graduate, you’re getting an individual who can add value to your organization from day one. **SBS**

About Simon Business School at the University of Rochester

Simon offers a rigorously quantitative, economics-based approach to decision-making in one of the most diverse student communities of any business school in America. Our degree programs inspire a new level of clarity: about how analytical frameworks drive success in business; about what it takes to collaborate and manage in the contemporary, global workplace; and about professional growth and goals.

Learn more about how Simon Business School’s STEM-designated MBA program can benefit your organization:

visit simon.rochester.edu/STEM
or email career@simon.rochester.edu

References

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