

The 10 Best AI And Data Science Master's Courses For 2021

[Bernard Marr](#) 12:34am EDT

This article is a follow-up to my list of best data science [undergraduate courses](#). While AI and data science make up part of most computer science undergrad degrees, it's at a post-grad level where students can really start to develop expertise.



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Some of the world's best tech-led colleges and universities offer specialized Master's Degree courses in these subjects, and often they are also world leaders in research, partnered with Silicon Valley businesses on cutting-edge projects.

Studying data science and AI at this level will mark you out to employers as someone whose technical expertise is likely to exceed that of candidates who only have a computer science bachelor's degree. It might also be a step towards a Ph.D.

If your interest isn't technical but business-oriented, there are also MBA courses appearing with specializations in AI that may be worth considering.

MIT – [Master of Business Analytics](#)

A course focused on practical applications of data and [machine learning](#), from one of the world's leading technology schools, would be a great place to start your advanced level education in this field. For any master's course, you will generally be expected to have either an undergraduate degree in a related field – for example, computer science or mathematics – but there is often some flexibility around these precise requirements. The other route that can qualify you is if you have gained extensive work experience in the field. MIT's Master, in line with most others, takes 12 months to complete, and aims to give students the knowledge and experience to start working with businesses and solving their problems.

Stanford University – [MSc in Statistics: Data Science](#)

Stanford is another world-leading US university with a very strong track record in AI research with global significance, as well as equipping students with strong practical skills and AI leadership potential. This course specializes in "data science with a computational focus," so could be considered more theoretical than a business-focused Master's, with courses covering advanced software development for scientists and engineers, multi-core computing, and statistical theory. However, electives can be taken in applied fields, including data-driven medicine, neuroimaging techniques, geostatistics, and social media analytics.

Carnegie Mellon – [Master of Computational Data Science](#)

Carnegie Mellon is another US institution that is world-famous for its research and accomplishments in AI and data science. Don't worry, this list isn't solely US-focused, but there's no denying that when it comes to data science and AI, a good number of the world's top-ranked universities are there. Studying here, you'll be

standing on the shoulders of giants such as [Herbert Simon](#) and [Allen Newell](#) – two of the great pioneers of modern-day AI development.

Imperial College London - [MSc in Business Analytics](#)

Frequently ranked among the world's top 10 universities, this flexible program is offered through the business school as either a one-year, full-time course or a two-year part-time course that can be studied remotely. Topics of study include big data management, analytic algorithms, and data visualization techniques. Students also have the chance to complete part of the course at a work placement as well as train to act in a consulting capacity on data science matters in business.

University of Bath – [MSc Data Science](#)

Another UK university that is fast developing a reputation as a center of data science excellence. This course teaches the fundamental software skills needed to work with machine learning and advanced analytical algorithms. The focus is on core competencies and fundamentals, rather than the more practical aspects covered in other courses, but students can choose to work in an applied field during their second-semester research task. The software skills for data science module also covers the evaluation of packages and programming languages for their suitability for real-world tasks.

University of Toronto – [Master of Science in Applied Computing: Data Science](#)

Students working towards the MSc in applied computing at this leading Canadian technical university can focus on this data science track. As part of the course, you have the chance to take an eight-month industrial internship where you will start putting the knowledge you are developing to use in solving real-world problems with big data, AI, and analytics.

University of Helsinki – [Masters Degree in Data Science](#)

Finland has invested heavily in training its people to be ready to capitalize on the AI and data science explosion, and much of that effort is focused through the University of Helsinki. Students can choose to specialize in technical fields relating to machine learning, computer vision, and advanced analytics, or in practical applications of these technologies. Students will learn to assess data science and AI techniques and practices in order to match them to suitable tasks, and will boost their employment prospects greatly with an advanced degree from a world-class European institution.

École Polytechnique – [MSc in Data Science for Business](#)

This leading Paris business and technology school offers a two-year master's program focused on filling the needs of global businesses for trained data science professionals. Its stated aim is to turn out dual-skilled graduates with both the technical and business knowledge to lead on data and smart computing initiatives in industry. The first year focuses on statistics, mathematics, and computer programming before students move on to practical problem-solving skills, involving use of data and algorithms to solve business challenges.

Tsinghua University – [Master in Advanced Computing](#)

China is a world leader in the development of artificial intelligence right now, and this Beijing university's Master's degree is one of the best-regarded in the country for AI and data science. Don't worry; the language barrier won't be a problem as all courses are taught in English. Explore and gain an in-depth understanding of topics including machine learning, big data and human/computer interaction from some of the country's most prominent experts, and work alongside major companies including Microsoft and IBM that are partnered with the university's researchers.

University of Hong Kong – [Master of Data Science](#)

Jointly administered by the school of computer science and the school of statistics and actuarial science, Hong Kong U is acknowledged as one of the leading centers of academic research in Asia. Available either full-time over 18 months or part-time over 30 months, you'll pick up expert skills in machine learning and data analytics. You'll also be deep-diving into practical applications, including the role of data across social media and the advances in the field made possible by the move to cloud computing.