The world of higher education is quick to respond to new trends and developments. Therefore, it is not surprising that new Masters programmes are constantly emerging to address the needs of learners in a changing world.

We live in a time of constant change. The advances in technology and medicine are startling. In fact, some say that technology is now moving too fast for people to keep up. At the same time, statistics show that the current era has more financial crises than preceding ones. The consequences of the last major one, the meltdown of 2007-2008, are still felt today.

Universities are keen observers of the world we live in, evidenced by their efforts to adapt and offer new solutions to students. Here are five Masters programmes that reflect today’s changing times.

**Masters Degree in Systemic Risk**
Yale School of Management (US)

**Course description**
The global financial crisis started more than 10 years ago, but memories of it are still vivid. The credit shocks and bank crashes led to the deepest world recession for a generation, followed by a decade of slow growth and efforts to fix the system. This new Masters programme offered by the Yale School of Management is a response to the global financial crisis and is based on the school’s expertise developed in the wake of the crisis.

This programme targets finance professionals seeking to explore and better understand financial crises and risk. There is a strong emphasis on the global financial crisis, regulatory agencies, and banking.

The school’s finance faculty has deep knowledge of capital markets and has produced influential academic work about the origins of the crisis. All of this comes with a steep price, though. Students should plan on a USD 93,900 budget if they gain admission to the programme.

**Requirements**
Aspirants should submit a nomination letter from a qualified institution. The letter will include a statement verifying the prospective student’s employment status with the qualified institution; a comment on their qualifications for the programme; and a guarantee that they will be able to return to the institution after the completion of the programme. In addition, there is a video interview, a requirement for a GRE or GMAT score, and a statement of interest. Candidates should also have an undergraduate degree in economics, finance, statistics, or a related field.

**Data, Economics, and Development Policy MicroMasters**
Massachusetts Institute of Technology (MIT) (US)

**Course description**
This MicroMasters degree programme has the potential to change the way graduate students are admitted and how much they pay. Learners who successfully complete the five MicroMasters courses and their corresponding in-person exams can apply to MIT’s new blended Masters programme in Data, Economics, and Development Policy. Those who get into the actual on-campus Masters programme will earn MIT credit for the MicroMasters courses.

The courses are designed for those interested in tackling, through the use of data, some of the most pressing challenges facing developing countries and the world’s poor. The MicroMasters degree programme consists of a series of five online courses and in-person exams. Learners will dive into microeconomics, development economics, probability and statistics, and engage with cutting-edge
research in the field. The programme is co-designed and run by MIT’s Department of Economics and the Abdul Latif Jameel Poverty Action Lab (J-PAL), which specialises in improving the effectiveness of programmes aimed at reducing poverty.

The cost of the courses in this programme varies depending on learners’ ability to pay. Learn more about personalised course pricing.

Requirements

All MITx MicroMasters courses are delivered on edX. To sign up for a MITx MicroMasters programme you need an edX account.

Masters in Machine Learning for Visual Data Analytics
Queen Mary University of London (UK)

Course description

“How can we design smartphones that sense your mood by reading your facial expressions or recognise hand gestures as a way to make a call? How do we develop systems that quickly and reliably analyse medical scans to assist with cancerous tumour diagnosis or improve the safety of self-driving cars with in-vehicle technology able to detect and modify a vehicle’s behaviour in any environment?”

These are just some of the questions that participants in this programme try to answer.

The goal of this programme is to address the growing skills shortage in research and industry for engineers capable of analysing and interpreting images and video. In addition to low-level image processing, the programme also covers high-level interpretation using the latest and most sophisticated machine-learning methodologies.

Tuition fees for home and EU students for the 2018/19 academic year amount to GBP 9,250. The fees for international students add up to GBP 19,500.

Requirements

Applicants should have an upper second class degree, usually in electronic engineering, computer science, maths or a related discipline. Those with a good lower second class degree may be considered on an individual basis. Applicants with unrelated degrees will be considered if there is evidence of equivalent industrial experience. International students need to provide an IELTS score of at least 6.5 or a TOEFL iBT score of at least 92.

Masters in Biofabrication M.Sc.
University of Bayreuth (Germany)

Course description

The rather peculiar news broke out a couple of years ago that liquefied spider silk turned into a gel via a three-dimensional printer could soon be regenerating damaged human heart muscle and nerve cells. This breakthrough was achieved by biomaterial experts from Germany’s Bayreuth and Wuerzburg universities. They mixed spider silk with connective fibroblast cells from mice to generate a “bio ink” or gel.

The University of Bayreuth has now launched a Masters in Biofabrication, claiming that things like 3D-printed ears based on spider silk are not science fiction. Researchers at the university are fascinated with the properties of spider silk, which has five times the tensile strength of steel, yet is just as elastic as rubber. It is also biocompatible, hypoallergenic, and has been shown to help heal wounds.

The Masters programme in Biofabrication aims to prepare students for a successful, ethically responsible career as engineers, working at the intersection of medicine and technology.

Requirements

Applicants need to have a Bachelor’s degree in Materials Science and Engineering, Engineering Science, or an equivalent degree. B2-level English and basic A1-level German language skills are required. Applicants also need to provide a 13-week industry internship and successfully complete the aptitude assessment process.

Masters in Artificial Intelligence
The University of Manchester (UK)

Course description

You must have noticed the current boom in all things AI. Artificial intelligence is one of the hottest, yet least understood topics of our time. Will algorithms take all our jobs? Can machines take over the world? The Manchester Master of Science programme provides answers to such questions. It allows students to choose from a broad range of units that not only cover core computer science topics, but that draw on the university’s interdisciplinary research strengths in areas such as Medical and Health Sciences, Life Sciences, and Humanities.

Students can count on many lectures and seminars supported by practical exercises.

The programme costs GBP 10,500 per year for UK and EU students and GBP 22,000 per year for non-EU students.

Requirements

Applicants need a First or strong Upper Second class honours degree, or the overseas equivalent, in computer science, or in a joint
degree with at least 50% computer science content. Applicants with extensive computer science industrial experience and a good honours degree, or its overseas equivalent, may also be considered for admission.

The world is indeed changing and is bound to change even faster. You can bet on universities and business schools coming up with ever more interesting programmes to respond to the latest creative destruction caused by technology or a new crisis. Brace yourselves for interesting times ahead and new Masters opportunities.