Institutional Statement on Artificial Intelligence

Artificial intelligence is transforming the world. We sit on the cusp of a revolution on the scale of the development of the steam engine or the launch of the internet. At IE University, we have always worked to anticipate the environment our graduates will live in, and to promote positive change through education, innovation, and research. This is the reason why we present today our statement on Artificial Intelligence, an institutional declaration that reaffirms our vision in this field. We are aware of the exponential nature of change in this field and will remain committed to assessing its development and impact well beyond the statement we issue today.

At IE University we have taken advantage of the application of technology to education for more than 20 years. We were pioneers in Europe in the design of online Masters and have been recognized among the most innovative universities in the world for our capacity to put technology at the service of society. Leveraging technology is in our DNA. We see the arrival of generative AI as an immense opportunity to enhance our pedagogy, and mould responsible leaders capable of facing today's challenges, by being more creative, agile, and productive. As we enter the AI Era it will also be growingly important that humans mediate the impact of these technologies through the use of critical thinking, and the development of a humanist approach to innovation.

Teams of academics and pedagogists from our institution have been working on adapting programs, formats, and methodologies to the latest technological developments. They have designed new content and teaching materials, developed specialized programs for students, professors, and staff, and looked at depth at the impact of AI on the job market. We have also developed numerous initiatives to enhance the governance of these technologies and to help our students, and society at large, navigate this process of immense change.

Leveraging AI to Enhance Education

These are some of the initiatives that have been developed with the aim of leveraging the potential of AI, improving research, and enriching the learning experience:

Including Technology in our Learning Journeys: In 2020 IE launched a <u>Bachelor in Computer Science and Artificial Intelligence</u>. Shortly after, the executive <u>Management Program on Data Analytics and Artificial Intelligence</u> was added to our portfolio. We have also reinforced our overall graduate portfolio with specialised programs in AI such as the <u>Master in Business Analytics and Big Data</u> or the <u>Master in Computer Science & Business Technology</u>. Additionally, content has been added to pre-existing graduate degrees. This includes courses in Big Data and Machine Learning, Machine Learning in Business, Chatbots, Robotics and Intelligent Interfaces in our <u>Master in Management</u>, courses in the regulation and governance of AI in the <u>Bachelor of Laws</u> and <u>Master of Laws</u>, or courses in AI and Deep Learning in Python in the <u>Master in Finance</u>, or Machine Learning and Data Management content in the <u>Master in Applied Economics</u>.

Our faculty has also begun to include AI-related content into their pre-existing courses. Professor Vicent Doyle now explores in his course a variety of applications of AI to the cultural and creative industries. Professor Begoña González-Cuesta is now examining with students the many ethical implications of image creation by generative AI tools. Professor Jaime Veiga, on the other hand, is now exploring the possible impact of AI on neuromarketing. Lastly, IE School of Architecture and Design professors have created a hands-on experience with students and built a vaulted pavilion using AI in our Segovia campus, while Professor Ruxandra lancu has developed specific content on its impact on our environment.



Enhancing our Pedagogy: Our faculty has also been working to ensure that AI enhances learning by being present in the classroom in a way that supports students' development of analytical, critical, communication and interpretive skills. Our professors are already using AI tools in Bachelor, Master, and Executive Education programs to improve knowledge delivery, while planning teams use them to cover management tasks such as measuring attendance, class participation, and designing teaching calendars. As an example, and led by Vice Dean <u>Rafif Srour</u>, the <u>IE Robotics and AI Lab</u> has developed, in collaboration with STEM researchers from other academic institutions and corporations, a suite of services that seek to improve learning in the classroom.

This continuous improvement is fed by a "train the trainers" approach. IE's faculty has organized a roadmap of periodic training sessions where professors share uses and good practices among IE's Faculty community.

Building Thought Leadership: IE has long been a proponent of bring together science, technology and the human sciences. In fact, the <u>School of Science and Technology</u> is precisely focused on this mission with the goal of training a new generation of leaders who can leverage the power of AI and technology to create positive change in the world. By integrating AI into the curriculum, the school can better prepare its students to tackle the complex challenges facing society today and tomorrow. Our commitment is to foster an interdisciplinary approach to AI that values collaboration, diversity, and ethical considerations. This is highlighted in the taught programs, as well as in the <u>Impact Xcelerator</u> lab, a hub for cutting-edge research and hands-on learning experiences that equips students with the tools they need to thrive.

Improving Career Outcomes and Impact. IE University's Careers Department is working closely with employers to make sure our graduates possess the right set of skills and the knowledge necessary to bring value to our corporations, governments, and institutions. Everyone at IE University is working hard to make sure our students are on top of the latest technological developments, and can leverage these as future entrepreneurs, employees, and policymakers. It is therefore no surprise that 40% of all of the graduates of our Master in Computer Science and Business Technologies, Master in Business Analytics and Big Data and Master in Digital Business and Innovation are now employed in the Al industry.

Governing Technological Change

Beyond the evident benefits of AI to learning, creativity and productivity, we also recognise the challenges it brings and the need to build ethical guardrails that accompany its deployment. Academic institutions should play a role in the design of the governance architecture of emerging technologies. IE University is contributing to this important debate through numerous initiatives:

Humanities in the Age of AI. The Humanities should be a fundamental lens through which to study and with which to navigate the impact of technology on our society. IE University has worked since its founding on the merging of the ability to reflect and analyse effectively, with the use of new technologies. Today this means adding an AI and data-analytics layer to critical thinking, decision-making, effective communication, collaboration, and creativity.

Professor <u>Brendan Anglin</u>, for example, is working to further develop the students' research and critical thinking skills by having them compare the results of research conducted by AI generators with those of traditional digital search engines. <u>Professor Javier Sauras</u>, on the other, works on the biases behind text generation. In addition, IE University's <u>Center for the Governance of Change</u> has just launched LyrAlcs, the first music recommender with AI Spanish-language song search. LyrAlcs revolutionizes music streaming and improves playlist recommendations by analyzing song lyrics.

Promoting an Ethical Use of Al: Our institution has first and foremost promoted an ethical use of Artificial Intelligence among its community. We have sought to prevent its misuse, be it through the generation and dissemination of misleading information, it's inappropriate use in classroom or outside of it, or in student evaluation. Building on this commitment, we have created a policy of academic integrity that defines the type of activities Al tools can be used for.

Beyond the internal use of AI, we are very active participants in the broader debate on AI ethics. We benefit here from a strategic partnership recently signed with UNESCO to work on the enhancement and promotion of an AI ethics framework. The work of Professor Theodore Lechterman, one of the organizers of the ACM/AAAI Conference on AI, Ethics, and Society (AIES), a pioneer conference for research on AI ethics, is also relevant in this space. Professor Lechterman recently published a chapter on accountability in AI in the Oxford Handbook of AI Governance and is currently working on the implications of AI for democracy in his forthcoming book on AI ethics.

A final clear manifestation of this desire to bring critical thinking and AI together is the course on Ethics of Emerging Technologies and its listing in the IE Impact. The IE Impact is a transversal program bringing together bachelor students from IE's five schools with the goal of exploring and addressing the most complex challenges of our time. Through the inclusion of a common course on the ethics of technology and the extensive use of critical thinking methodologies in the IE Impact, we seek to reach every IE undergraduate and to equip them with the right tools to be effective leaders.

Researching Al's Impact on Society: Many of our researchers are working on analysing the impact of Al on society and on ways to minimise its negative externalities. Examples of relevant research initiatives in this field include the Tech4Democracy project within IE's Center for the Governance of Change. This initiative studies the political, economic, and societal implications of emerging technologies, most notably Al, and their impact on our democracies.

The research group on Innovation, Artificial Intelligence, and Emergent Technologies led by Professor Alvaro Arenas has, in turn, allowed us to develop abundant work on the benefits and drawbacks of AI. Professor Luz Rello, a member of this research group, has used computer games and machine learning tools to predict the risk of dyslexia, and to help address it early on. Her work led to the development of an AI-based application that has been used over 350,000 times in Spanish public schools to help detect and correct dyslexia (Dytective). Additionally, Professors Arenas and Konstantina Valongianni are currently involved in the EUfunded project Digymatex, which applies Machine Learning techniques to the assessment of the maturity of children and teenagers.

In the field of Law, IE has established <u>The Jean Monnet Centre of Excellence for Law and Automation</u> led by Professor <u>Francisco de Elizalde</u>. This center has several lines of research dedicated to the study of the use of Al tools by governments, courts, and legal actors. Important work is also being done in this field by Professor <u>Antonio Aloisi</u>, who focuses on the need to govern emerging technologies in order to achieve economic, social and political sustainability.

This statement reflects our commitment to anticipating new trends and detecting new opportunities brought about by technology from a firm footing in principles of humanistic, sustainable, and responsible innovation.

IE University, May 2023.