

Collective intelligence

Business and Management Pole

Accredited by the Ministry of Higher Education, Scientific Research, and innovation

ABOUT MOHAMMED VI POLYTECHNIC UNIVERSITY

University Mohammed VI Polytechnic (UM6P) seeks to empower a new generation of talents that will build and lead the future of Africa. Dedicated equally to cutting-edge research and world-class teaching, UM6P is working in partnership with leaders in industry, government, and civil society to address the most urgent needs of Morocco, Africa, and beyond. Its fast-growing community includes more than 5000 students (including 700+doctoral students) from over 30 countries.

From its main campus in Benguerir, near Marrakech, and its branches in Rabat, Laayoune and Paris, UM6P proposes a new kind of learning environment for its academic programs, inspiring innovation and entrepreneurship through Living Labs, digital tools, and peer-based learning.

UM6P's academic and research programs span science and technology, business and management, social sciences, and medicine. Accompanied by a firm commitment to social impact, these programs are empowering minds capable of solving Africa's most urgent challenges and bringing these solutions to the world.

UM6P is ranked in the 401-500 band globally and 1st in Morocco.



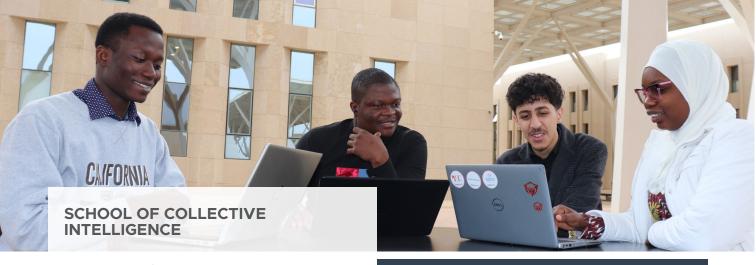








You are most welcome to-join us



The School of Collective Intelligence is dedicated to generating knowledge and tools for a more collaborative society.

Founded in June 2019, SCI created the world's first accredited Master in Collective Intelligence, launched research programs in collective decision-making and cultural evolution, and accompanied partners such as the Obama Foundation and the Commission Spéciale sur le Modèle de Développement (CSMD), as well as advising industry-leading Moroccan companies on smarter forms of collaboration and leadership.

At our campus in Rabat, SCI offers research, teaching and executive programs that help leaders use empirical science to build better teams and organizations. Research collaborations include scholars from leading institutions such as MIT, NYU, and Ecole Normale Supérieure-Paris.

OUR MISSION

- **1.** Generate new knowledge about human collaboration through world-class research.
- **2.** Help leaders unlock the intelligence of their teams, businesses and communities.
- **3.** Harness the intelligence of diverse crowds to create a more sustainable world.

WHAT IS **COLLECTIVE NTELLIGENCE?**

Collective intelligence (CI) describes the capacity of groups, when organized in certain ways, to outperform individuals in decision-making, problem-solving, and learning. Sometimes called "the wisdom of the crowd" effect, collective intelligence has long propelled human progress – but it can also fail, with terrible consequences for teams, companies, and society.

The science of collective intelligence explores the mechanisms that unlock the wisdom of the crowd, including different methods of combining ideas, maximizing the flow of information, methods for group decision, and more. The science of CI is interdisciplinary, combining insights from cognitive science, anthropology, data science, computer science, and management studies.

WHY DOES THE WORLD **NEED** COLLECTIVE INTELLIGENCE??

As problems in business and society grow more complex, solving them requires many minds to work together well. Group intelligence doesn't just happen – it must be organized and equipped for the task at hand.

The most innovative teams, companies, and societies are discovering that solving complex problems requires new forms of collaboration. These forms of collaboration, whether digital or face-to-face, can produce not only better, faster decisions but can also create a "story of us" that strengthens social bonds and team motivation.

By understanding the human mind, collaborative leaders can transform organizations to make better use of the "untapped intelligence" all around them – accelerating innovation and building happier, more resilient teams.

OBJECTIVES

The Masters in Collective Intelligence will train students in the basic pillars of collective intelligence, including cognitive and data sciences as well as participatory methods and organizational design. Particular emphasis will be placed on mastering experimental and statistical techniques for testing the effectiveness of different methods for maximizing collective intelligence. Students will gather experience applying these methods in research and/or real-world settings.

CAREER OUTLOOK

Interest in collective intelligence is on the rise in corporations, universities, and societies at large. This program will prepare our students for a range of careers as researchers, analysts, experts or facilitators in various fields of problem solving, digital or organizational transformation, public innovation and more.

CORE COMPETENCIES

- Masters students in Collective Intelligence will learn to think critically and scientifically about data, human behavior, and practical problems such as leading positive behavior change within teams, organizations and communities.
- They will learn how to carefully design behavioral experiments and randomized controlled studies, in which experimenters manipulate variables between experimental conditions in order to infer causal information about how the mind works and/or the effectiveness of certain interventions within organizations.
- In addition, students will develop technical skills in the areas of data science, statistics and computer science (e.g., designing computer systems to augment and complement collective reasoning and problem-solving). Finally, they will gain experience designing and applying technologies that reinforce collective intelligence in real-world settings.

ELIGIBILITY



Candidates must hold a Bachelors degree (BA) or equivalent. Given the highly interdisciplinary nature of our Master's program, we are open to students with a wide range of academic backgrounds. Candidates will be evaluated on the basis of their skills and motivation. Knowledge of applied statistics, and management are considered positive traits but not necessary for admission. Basic coding skills are highly recommended.

PEDAGOGICAL COMMITTEE



Pr. Cathal O'MADAGAIN (UM6P) Academic & Scientific Director Cognitive Science, Philosophy

Prof. O'Madagain's work explores the social foundations of human thinking. He studied at the University of Toronto and previously worked as a research scientist at the Max Planck Institute for Evolutionary Anthropology.

At SCI he leads research on collaborative learning and on cross-cultural differences in the ways we share information and solve problems in groups.



Pr. Sarah ALAMI (UM6P) Master Coordinator Anthropology, Human Behavior Ecology

Pr. Sarah Alami is an anthropologist specializing in human behavioral ecology and data collection. Her research focuses on socioeconomic transformations in rural areas, examining the impact of climate change, lifestyle changes, and market participation on health, gender roles, and community dynamics. She works with the Tsimane and Moseten populations in the Bolivian Amazon and has recently started research in the High Atlas in collaboration with a colleague at SCI.



Pr. Alejandro ERUT (UM6P) Anthropology, Experimental Philosophy, Cognitive Science

Dr. Alejandro specializes in cross-cultural research on conceptual development and child cognition, drawing on methodologies from anthropology, psychology, and experimental philosophy. He has conducted extensive fieldwork in Ecuador, Vanuatu, India, and Argentina, with a primary focus on the Shuar and Achuar communities of the Western Amazon.



Pr. Ikram CHAIRI (UM6P) Machine Learning, Data Science

Pr. Ikram Chairi is a machine learning researcher. Her work centers on extracting knowledge from data through advanced data science and artificial intelligence techniques. She focuses on designing novel machine learning algorithms capable of overcoming data quality challenges, particularly issues such as data imbalance and limited sample availability. Her research aims to make data-driven models more robust, interpretable, and effective in real-world applications where data imperfections are common.

OTHER MEMBERS OF OUR FACULTY

Pr. Florencia
DEVOTO
(UM6P)
Development
Economics, Education



Pr. Fatima Ezzahra BENMARRAKCHI (UM6P) Computer Science, Education



Pr. Jose SEGOVIA MARTIN (UM6P) Complex Systems, Computational Social Science



Pr. Mehdi MOUSSAID (UM6P) Cognitive Science



Pr. Cody MOSER

Complex Systems,

Computational

Social Science



Pr. Rebecca KOOMEN (UM6P) Evolutionary and Comparative Psychology



Pr. Ed SEABRIGHT (UM6P) Anthropology, Evolution of Political Systems



Pr. Manal EL AKROUCHI (UM6P)



Pr. Lex Paulson (UM6P) Philosophy, Political Science



Pr. Brent STRICKLAND (UM6P/ENS-UIm) Cognitive Science, Core Cognition



Pr. Emile SERVAN-SCHREIBER (UM6P) Cognitive Science, Crowdbased Forecasting



Pr. Mark KLEIN
(UM6P)
Al-supported Collective
Decision-Making



MASTERS: 1ST YEAR

- PROGRAMMING, DATA SCIENCE AND STATISTICS 1
- COMPUTER SCIENCE METHODS IN COLLECTIVE INTELLIGENCE 1
- COGNITIVE SCIENCES 1
- EXPERIMENTAL METHODS 1
- LANGUAGES AND COMMUNICATION (FRENCH/ENGLISH)
- HISTORY AND PHILOSOPHY OF COLLECTIVE INTELLIGENCE
- · BASICS OF COMPUTER SCIENCE
- PROGRAMMING, DATA SCIENCE AND STATISTICS 2
- COMPUTER SCIENCE METHODS IN COLLECTIVE INTELLIGENCE 2
- · LEADERSHIP AND ORGANIZATIONAL CHANGE
- COGNITIVE SCIENCES 2
- EXPERIMENTAL METHODS 2
- LANGUAGES AND COMMUNICATION (FRENCH/ENGLISH)
- FACILITATION AND COMMUNICATION SKILLS

MASTERS: 2ND YEAR

- PROGRAMMING, DATA SCIENCE AND STATISTICS 3
- COMPUTER SCIENCE METHODS IN COLLECTIVE INTELLIGENCE 3
- COGNITIVE SCIENCE III ADVANCED EXPERIMENTAL METHODS.
- POLITICAL SCIENCE AND PARTICIPATORY GOVERNANCE
- LEADERSHIP LAB
- LANGUAGES AND COMMUNICATION (FRENCH/ENGLISH)
- CULTURE AND ART SKILLS







EMPLOYMENT **OPPORTUNITIES**

We aim to prepare our students for a range of opportunities in the academic, private, public, and non-profit sectors. Students will develop a range of technical and human skills that will prepare them for careers as:

- Computer and data scientists, who understand the social contexts these tools are needed for;
- Researchers, who can build sustainable development projects or pursue theoretical work on culture and society;
- Facilitators and organizational-transformation specialists, who can use cognitive science to understand organizational behavior.

Moreover, we provide opportunities to "learn by doing" as well as networking opportunities so that motivated students come out prepared to thrive in a fast-changing job market.

Six-week summer internship

Admissions criteria

Candidates must hold a Bachelor's degree (BA) or equivalent. Given the highly interdisciplinary nature of our Master's degree, we are open to all disciplines. Candidates will be evaluated on the basis of their skills and motivation.

Application requirements*

- Curriculum Vitae
- Motivation letter
- Two ID photos
- Copy of ID/Passport
- Copy of all diplomas or degree certificates
- Undergraduate transcripts
- Two letters of recommendation

*Original documents and / or certified copies will be required at the time of final registration.

See our in depth FAQ here



Duration 2 years



Training venue Mohammed VI Polytechnic University - Rabat



Seats 20 students



Language English (Full Time Master's degree program)

Admissions calendar

We invite you to sign up online via the link <u>my.um6p.ma</u> by completing the requested information or by contacting us at: Clmaster@um6p.ma.

If you are shortlisted, you will be invited to a written competitive examination followed by an oral interview in keeping with the following schedule:

- April 15th : Application deadline
- May/June: Written examination and oral interview
- **End of June :** Admission results and receipt of scholarship application files
- Septembre/Early October : Start of term

Selection process

- Application Review
- Written Exam
- Oral Interview

Scholarships

In line with its civic commitment, UM6P supports the students through an attractive system of academic scholarships and financial aid grants.

Tuition and fees

• Registration fee : 5.000 Dhs

• Tuition costs: 75.000Dhs / year

More information on scholarship requirements available here .

Tuition covers courses, access to the Language Lab and the Learning Center, access to sporting facilities of UM6P. They do not cover the cost of housing or daily living.

More information on accommodation and fees available here.

FOR MORE INFORMATION



University Mohammed VI Polytechnic Coordinator: Sarah ALAMI Contact person: Ahlam.ELHOUSSE@um6p.ma

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