

PROGRAM PROPOSAL, UNIVERSIDAD DE BUENOS AIRES

DRAFT

Licenciatura en Sistemas Complejos

Bachelor of Systems and Decision Science

UNIVERSIDAD DE BUENOS AIRES

FACULTAD DE CIENCIAS ECONÓMICAS · FACULTAD DE INGENIERÍA

Duration: 3.5 years

Cohort: 30–40 students

8-week blocks

VIEW: STUDENTS

Preface

This is a proposal, a draft document, not an approved program. It presents the Licenciatura en Sistemas Complejos, Bachelor of Systems and Decision Science, for consideration as a new undergraduate degree at the Universidad de Buenos Aires.

It is written for three audiences simultaneously. For the academic authorities of UBA, it presents the intellectual foundations, pedagogical model, curriculum, and operational structure of the program in sufficient detail to evaluate its rigor and its coherence. For the faculty who would teach in the program, it presents the disciplinary architecture and the pedagogical commitments. For the students who would inhabit it, it presents the argument, the founding conviction that the program is a response to, and the bet it is making about what the world needs.

The document is bilingual: Spanish by default, English available via the toggle in the top right. Course names and key institutional terms are given in Spanish.

If approved, this document will become the full account of what was approved and why. Until then, it is a proposal under active development. Feedback is welcome.

Executive Summary

3.5 YEARS	39 COURSES	6 STUDIOS
30–40 STUDENTS PER COHORT	8 WEEKS PER BLOCK	0 WRITTEN FINAL EXAMS

The Licenciatura en Sistemas Complejos, Bachelor of Systems and Decision Science, is a new undergraduate degree at the Universidad de Buenos Aires designed to form a generation of builders capable of operating at the intersection of technology, institutions, and power in a world of abundant artificial intelligence.

The program's objective is formation, the development of a kind of person, not the transmission of a body of content or the credentialing of a professional skill. Specifically, it forms people who possess the two things that AI cannot yet replace: judgment under genuine uncertainty and the capacity to construct legitimacy. People who can decide what to build, not just how to build it. People who can take responsibility for outcomes that affect others at scale.

The curriculum spans mathematics, physics, biology, computer science, machine learning, economics, game theory, institutional design, political economy, philosophy of science, and cultural analysis. It is completed by six Studio projects of increasing ambition, culminating in the creation of a real company during the

final Studio. The program runs in eight-week blocks, a structure borrowed from the École Polytechnique, with three courses per block and a Studio running continuously across two consecutive blocks.

The program admits 30 to 40 students per cohort through a competitive three-stage selection process. There are no written final exams. All primary evaluation is in person, in real time: written exams, oral defenses, live coding, or public defense depending on the course. AI tools are mandatory throughout.

The world has enough people who know how to write a prompt. It needs people who can decide what to build, why it matters, and how to make it last.

One useful historical reference is Oxford's PPE, Philosophy, Politics and Economics, a degree built to form people capable of reasoning across institutions, policy, and public life. The analogy is not curricular equivalence but institutional ambition: this program asks what a similarly integrative undergraduate formation would require today, in a world shaped by AI, complex technical systems, and institutional fragility. Its answer combines philosophy, economics, and political judgment with mathematics, physics, computer science, machine learning, and a sustained builder orientation.

It was designed by studying reference programs, MIT, Stanford, Caltech, École Polytechnique, Oxford, Cambridge, Harvard, Carnegie Mellon, the Santa Fe Institute, and asking which elements of those traditions could be combined into a coherent formation for this moment. The answer became the curriculum.

Context and Motivation

1.1 The Moment

We are living through a transition comparable in scope to the Industrial Revolution. Artificial intelligence is not a new tool in a stable landscape. It is a force that is reorganizing what kinds of work are possible, what kinds of organizations are viable, what kinds of knowledge are scarce, and what kinds of people are needed to navigate the transition.

The most visible consequence is the automation of cognitive labor. Tasks that required years of training, writing, coding, legal research, financial analysis, medical diagnosis, are being performed by AI systems at a fraction of the cost and time. This is not a future prediction. It is happening now, and the rate of change is accelerating.

The less visible consequence is more important: the automation of cognitive labor raises the value of what cannot be automated. Judgment. Legitimacy. Responsibility. The capacity to decide what to build, not just how to build it. The capacity to operate in institutions, with their politics, their cultures, their histories, their competing interests, and make things happen despite them. The capacity to take responsibility when systems fail and other people bear the cost.

These capacities are not the primary focus of traditional university education. They require a different kind of formation, one that combines disciplinary rigor, cross-domain integration, and sustained practice under real constraints.

1.2 The Limits of Traditional Disciplines

The modern university is organized around disciplines that were designed for a different world. Each does its work with excellence: computer science forms people who build sophisticated software; economics forms people who model markets rigorously; political science forms people who analyze power in depth; business schools form people who manage existing organizations effectively. That disciplinary depth is a real achievement, and this program respects it and builds on it.

What a single discipline is unlikely to produce by itself is fluency across all of them, the capacity to move between technology, economics, law, culture, and institutions, where many of the most complex problems live. Reference programs such as computer science at MIT, Oxford's PPE, or economics at Harvard show the strength of disciplinary depth. Disciplinary integration is a distinct, complementary task that requires its own curricular architecture.

The result is a systematic gap between the complexity of the problems that need to be solved and the formation of the people who are supposed to solve them. Regulators who do not understand the technology they regulate. Technologists who do not understand the institutions their technology disrupts. Economists who do not understand the cultural and political constraints on the policies they recommend. Leaders who do not understand the systems they are responsible for.

1.3 The Gap

This gap is not new. But AI is making it catastrophically more visible. As AI systems become more capable, the people directing them need to be more capable, not less. The risk is not that AI replaces human judgment. The risk is that human judgment atrophies at exactly the moment when it matters most.

The gap has a specific shape. On one side: an unprecedented supply of technical capability, analytical power, and information processing. On the other side: a shortage of people capable of deciding what to do with it, of setting objectives,

navigating institutional constraints, earning the trust of the people affected, and taking responsibility for the outcomes.

Filling that gap is the purpose of this program.

1.4 Why Argentina and Why UBA

Argentina is not an obvious place to launch a program of this ambition. It is, however, a necessary one.

Latin America is systematically underrepresented in the global conversation about artificial intelligence, institutional design, and the future of technology. The frameworks being developed to govern AI, to regulate platforms, to design the institutions of the post-AI world, these are being developed primarily in the United States, Europe, and China. Latin America is largely absent from the design process and will largely inherit the results.

This is not inevitable. Argentina has one of the most educated populations in Latin America, a strong tradition of mathematics and science at the university level, a culture of intellectual seriousness, and a generation of young people who are as connected to global technological and intellectual currents as any in the world.

The Universidad de Buenos Aires is the natural home for this program. UBA is the largest and most prestigious university in Argentina, with a tradition of academic rigor and intellectual independence that is rare in the region. It has produced Nobel laureates, Fields Medal winners, and generations of scientists, lawyers, doctors, and economists who have shaped Argentine public life.

What UBA has not produced, and what Argentina needs, is a generation of people capable of building the institutions, companies, and systems that the post-AI world requires. The Licenciatura en Sistemas Complejos is designed to produce that generation.

1.4.1 Why UBA Should Host This Program

The choice of UBA as host is neither accidental nor ceremonial. Argentina has several universities of high quality, and this program could be imagined at more than one of them. The combination that UBA offers, however, scale, a tradition of rigor, intellectual independence, free admission, and regional prestige, is not easily replicated by any other institution in the country.

UBA is the heir to the scientific tradition that produced Bernardo Houssay, Luis Federico Leloir, and César Milstein, three Nobel laureates trained in its classrooms, in different disciplines, across three generations. That tradition is not merely a historical fact: it is a way of working, an expectation of seriousness, an insistence that university formation be a formation in the craft of thinking carefully. The founding of the Facultad de Ciencias Exactas y Naturales, the creation of the Carrera de Sociología, and more recently the Licenciatura en Ciencia de Datos, show that UBA is capable of generating new disciplines when intellectual conditions demand it. This program is situated in that same lineage.

To this is added a decisive feature: UBA is a free public university. This means the program can admit the most capable students without filtering them by family income. The selection the program requires is pedagogical, the cohort is small because the formation it offers demands closeness with faculty and mentors, but it is not economic. In a program designed to form people who will serve the public interest, this is not an administrative detail: it is a condition of possibility. A formation of leaders that is filtered by family wealth produces leaders filtered by family wealth. UBA, by contrast, allows the program to seek talent wherever talent happens to be.

1.4.2 Why Economic Sciences and Why Engineering

The program is jointly hosted by the Facultad de Ciencias Económicas and the Facultad de Ingeniería. This architecture is not an administrative compromise: it is the spine of the program. Its intellectual core rests on the integration between mathematical and computational rigor, the tradition of Ingeniería, and economic,

political, and institutional reasoning, the tradition of Ciencias Económicas. Neither faculty alone covers the disciplinary range the program requires; together they cover it naturally.

This kind of initiative, sustained by two large faculties, each with its own tradition and its own teaching body, is precisely what a large public university can offer and what private institutions, generally organized around a single faculty or a single disciplinary profile, are rarely positioned to mount. UBA has a rich history of cross-faculty collaboration, from the historic cátedras paralelas to contemporary inter-faculty institutes. The program inscribes itself in that institutional practice.

The dual home also gives the program a double credibility. A formation of this kind needs to be taken seriously both by the tradition of engineering and the exact sciences and by the tradition of economic analysis and public policy. If the program were solely an Ingeniería initiative, its graduates would be read as technologists with an interest in institutions; if it were solely a Ciencias Económicas initiative, they would be read as economists with an interest in technology. The program requires both readings at once, and therefore requires both homes at once.

1.4.3 The Argentine and Latin American Problem This Program Addresses

Argentina has historically produced individual scientists and technicians of the first rank. What has been harder, and this is a structural observation, not a critique of any particular period of government, is translating that individual capacity into durable technical and scientific institutions that outlast their founders and accumulate over time. The country has the human raw material; what is frequently missing is the institutional architecture that this raw material needs in order to become collective capacity.

The post-AI transition will be sharper in countries that import frameworks instead of designing them. AI governance, data infrastructure, regulatory regimes, and technical standards are being written in a small number of places in the world, and Latin America largely receives them pre-written. The consequence is predictable: the decisions that most affect the region are taken in other languages,

in other institutions, with other priorities. This program is explicitly a step toward forming the people capable of designing those frameworks locally, not as an act of rhetorical sovereignty, but as a concrete technical capacity.

Argentina also faces a specific set of institutional challenges, monetary instability, regulatory turnover, technology adoption gaps across sectors and across regions, that require people who simultaneously understand technical systems and institutional design. This profile is exactly the one the program seeks to form. And there is an additional reason, painful but pertinent: a significant share of Argentine graduates in engineering and computer science emigrate. Building a program that increases local leverage, the set of opportunities, networks, and projects that make it worthwhile to stay and build here, is also a modest contribution to that problem.

1.4.4 The Public University Mission

UBA's foundational mission, free, high-quality, accessible education in the service of national development, is not a slogan: it is the condition that makes this program possible. A formation that aspires to produce people capable of serving the public interest justifies itself as a public investment, not as a private product. That is why admission is independent of family income; that is why the small cohort size reflects a pedagogical decision, not a rationing mechanism by price; that is why the proposal is honest when it presents itself to a public university.

The program's outputs are aligned with that mission in a direct way. Its graduates are intended to enter public service, institutional design, technical leadership in Argentine firms, research, and the founding of organizations that the country needs. The knowledge produced along the way, the institutional designs, public-service prototypes, and research outputs generated in the Studios and integrative projects, is a public good and is made available as such.

Ultimately, the graduates' capacity to build durable Argentine institutions is itself a contribution to *la cosa pública*. A public university that forms people capable of strengthening the country from within is fulfilling its mission in the most

fundamental sense. This program, in its design and in its aspirations, understands itself as a contemporary expression of that historic UBA vocation.

1.5 Why Now

Every technological transition produces a window of opportunity for new institutions. The people and organizations that shape the transition, who define its norms, build its infrastructure, design its governance, are disproportionately formed in the early years of the transition, not after it has stabilized.

We are in that window now. The institutions, companies, and norms that will govern AI are being built in the next five to ten years. The people building them are being formed now. A program that begins admitting students today will produce its first graduates in three and a half years, precisely when the transition is at its most critical and most open to influence.

This is not a program for the world that exists. It is a program for the world that is being built.

The Founding Argument

3.1 The Objective of the Program

What this program asks of you operates at three levels.

The immediate level: learning to build systems, technical, institutional, economic, that survive contact with reality. In a world where artificial intelligence is abundant and cheap, that is harder, not easier. AI does not build for you; it forces you to know what you are building.

The deeper level: developing the two things AI cannot yet replace, judgment under genuine uncertainty and the capacity to construct legitimacy. Deciding what to build, not just how to build it. Answering for outcomes when they affect other people. That is what you are being asked to learn. It is hard, and that hardness is the point.

The strategic level: being part of the capacity the country needs to participate in, and shape, the institutions, companies, and governance frameworks of the post-AI world. Not receiving frameworks designed elsewhere: helping to design them from Argentina.

In one sentence: you come out a builder, with the mathematical rigor, scientific literacy, computational depth, institutional understanding, and philosophical grounding to create systems that matter, and with the judgment and legitimacy to be trusted with them.

3.2 What AI Changes

Artificial intelligence changes the economics of knowledge. Tasks that required a human being with years of training can now be performed by a system trained on vast amounts of data. Previous waves of automation, mechanical, electrical, digital, automated physical and routine cognitive labor. AI automates non-routine cognitive labor: the kind of work that previously required judgment, expertise, and flexibility.

The consequences for education are direct. If AI can write code, what should a computer science education teach? If AI can analyze legal documents, what should a law school teach? If AI can generate business plans, what should a business school teach? These questions do not have easy answers. But they have one common implication: the value of education cannot lie primarily in the transmission of content or the development of routine skills. It must lie in the development of capabilities that AI does not yet have and may not have for a long time.

3.3 What AI Does Not Change

Three things remain irreducibly human even as AI becomes more capable.

Judgment under genuine uncertainty. AI systems optimize for specified objectives. They are extraordinarily good at this. What they cannot do, yet, is decide what the objective should be when objectives are in conflict, when the consequences are irreversible, when the information is genuinely incomplete, and when other people's lives are affected by the outcome. That is judgment. It requires not just intelligence but wisdom, experience, and a capacity for moral reasoning that current AI systems do not possess.

Legitimacy. Institutions, organizations, and systems require the trust and cooperation of the people they govern. That trust is not granted automatically, it is earned through the quality of relationships, the consistency of behavior, the fairness of processes, and the credibility of the people involved. An AI system can

optimize a governance mechanism. It cannot, by itself, make that mechanism legitimate. Legitimacy is a human achievement, constructed through culture, history, and the quality of human relationships.

Responsibility. When systems fail and other people bear the cost, someone must be accountable. Accountability requires human beings who can be held responsible, who can explain their decisions, bear the consequences, and make amends. AI systems cannot be held responsible in the morally relevant sense. As AI systems become more capable and more consequential, the humans who direct them must become more capable of bearing responsibility, not less.

3.4 The Formation Imperative

These three capacities, judgment, legitimacy, and responsibility, cannot be taught in the conventional sense. They cannot be transmitted through lectures or assessed through written exams. They are formed through practice, pressure, and accountability. Through building things and watching them fail. Through defending decisions under adversarial questioning. Through working in teams where coordination is hard and the stakes are real. Through being responsible for outcomes that affect other people.

This insight is the foundation of the program's pedagogical model. The program does not primarily teach. It forms. The difference is not semantic. Teaching transmits content. Formation develops character, judgment, and capability. The Studio system, six projects of increasing ambition, each involving real stakes and public accountability, is the mechanism through which formation happens.

The courses are not secondary. Mathematical rigor, physical intuition, computational depth, economic reasoning, philosophical clarity, these are necessary conditions for good judgment. A person who cannot reason formally cannot evaluate the assumptions in a model. A person who does not understand physics cannot reason about the physical constraints on a system. A person who

has not thought seriously about epistemology cannot understand the limits of what they know. The courses build the intellectual foundation. The Studios build the judgment on top of it.

3.5 Formation for Public Responsibility

This program is designed as a public elite formation for high-impact responsibilities. That phrase requires precision.

Elite, in this context, does not mean private status, social privilege, or personal superiority over graduates of other programs. It means a selective, rigorous, public formation for a specific capacity: bearing the weight of decisions that affect many people. Every complex society needs people with that capacity, people who can take part in the design of its institutions, the running of its organizations, the construction of its infrastructure, and the navigation of crises that no institution fully anticipates. That capacity is not produced automatically. It is formed, through education, through experience, through the sustained pressure of high expectations.

Forming technical and institutional leaders is one of the oldest functions of universities, public and private. Oxford's PPE, France's grandes écoles, the great American research universities, all of them were designed, in part, to produce people capable of sustaining high-stakes decisions in complex societies. What none of them was designed to produce, and what the post-AI world needs, are people who combine technical depth with institutional literacy, scientific rigor with cultural understanding, and the capacity to build with the capacity to deliberate and account for the result. This program does not compete with the existing degrees at UBA: it fills a space that no single discipline addresses on its own.

The program admits a small cohort, between thirty and forty students, through a competitive selection process. That is a fact about the pedagogical structure: a public elite formation, built around Studios with public accountability, requires proximity, intensity, and a small-cohort environment. It is not a claim about the

relative worth of its students compared to those of other programs. Its graduates will not all become officials or company directors. Some will build companies, others will design institutions, others will do research, others will work in public administration, others will contribute to strengthening Argentine institutions from positions that do not yet exist. All of them will be prepared to take responsibility for systems that affect many people.

Program Identity and Positioning

4.1 What This Program Is

The Licenciatura en Sistemas Complejos is a degree for builders. Not builders in the narrow sense of software engineers or product managers, builders in the full sense of people who take a problem that exists in the world and convert it into a system that solves it. The system might be a company, an institution, a piece of software, a policy, an organization, or some combination of all of these. What matters is that it works, that it survives contact with reality, that it earns the trust of the people it serves, and that someone is accountable for it.

The program trains builders by integrating four dimensions that rarely appear together in one undergraduate degree: mathematical and scientific rigor, computational depth, institutional literacy, and philosophical grounding. These are not four separate tracks. They are four dimensions of a single formation. A graduate who works across them is prepared to approach problems that do not fit comfortably inside a single discipline.

4.2 What This Program Is Not

It is not a computer science degree. Computer science programs produce excellent programmers and researchers. They do not produce people who understand the institutional, cultural, and political dimensions of the systems they build. A computer science graduate can write the code for a platform that disrupts an industry. They are rarely equipped to understand the regulatory environment it will face, the cultural norms it will violate, the institutional resistances it will encounter, or the responsibility they bear for the consequences.

It is not an economics degree. Economics programs produce people who can model markets and analyze policy. They do not produce people who can build things. The gap between economic analysis and institutional practice is enormous, and most economics graduates never cross it.

It is not a political science degree. Political science programs produce analysts and, sometimes, practitioners of politics. They do not produce people with the technical depth to understand the systems, computational, financial, biological, that modern governance must regulate and manage.

It is not a business school. Business schools train managers of existing organizations. This program aims at a different task: preparing people who can create new institutions, products, and systems, reason about the foundations within which they operate, and take responsibility for outcomes that affect many people.

It is something new: a degree that learns from those traditions, adapts their useful mechanisms, and integrates them into a coherent formation for the post-AI world.

4.3 The PPE Comparison

One useful historical reference for what this program attempts is Oxford's PPE, Philosophy, Politics and Economics. PPE was created in 1920 as an interdisciplinary formation for people who would work in politics, public administration, diplomacy, journalism, and intellectual life. Its later influence shows the force of a simple idea: some public and institutional responsibilities require an education that crosses disciplines from the beginning.

PPE's insight was that governing complex societies requires fluency across disciplines, that a person who understands only politics without economics, or only economics without philosophy, is systematically unequipped for the decisions they will face. The integration of three disciplines into a single coherent formation was PPE's great contribution.

This program takes that insight into a different moment. The post-AI world requires fluency not only across the humanities and social sciences, but also across technical systems, science, economics, and institutions. It also requires a more explicit practical orientation: the capacity to build and sustain systems, not only to analyze them.

It is worth being precise about the scope of the comparison. What this program borrows from PPE is the **integrative ambition**: the conviction that some responsibilities require formation that crosses disciplines from the start, not early specialization. What this program does **not** borrow from PPE is its pedagogical mechanism. PPE works through Oxford's tutorial system, weekly one-on-one sessions where a student defends an essay to a tutor, a practice that produces analytical maturity by accumulation over three years. This program adopts a different mechanism, the Studio system and public defense, fitted to a different institutional context and to a world where building matters as much as arguing. The comparison is of ambition, not of mechanism.

If PPE was one twentieth-century answer to the formation of public judgment, this program asks what an analogous answer would require in the twenty-first century.

4.4 The Builder Orientation

The program's builder orientation is not a preference or a stylistic choice. It is a pedagogical and philosophical commitment grounded in a specific view of what knowledge is for.

Knowledge that cannot be applied to the construction of something real is incomplete. Not wrong, incomplete. The test of whether you understand a system is not whether you can describe it but whether you can build one, fix one, or identify precisely why it is failing. This is the insight behind the Studio system, behind the requirement that every evaluation take the form of a defense of something functional, and behind the program's insistence that AI tools be used aggressively rather than avoided.

In a world where AI can generate descriptions and analyses of almost unlimited sophistication, the ability to describe and analyze is no longer sufficient evidence of understanding. The ability to build, to make decisions about what to build, to take responsibility for the outcome, and to learn from the failure, is what distinguishes a person who genuinely understands from a person who merely appears to.

4.5 The Name

The degree is called **Licenciatura en Sistemas Complejos** in Spanish and **Bachelor of Systems and Decision Science** in English. The difference is deliberate.

"Sistemas Complejos" makes a claim about the world, that what matters now are systems that resist simple optimization, that behave differently at scale than their parts suggest, that fail in ways nobody predicted. The name is a bet on what kind of thinking the next decades will demand.

In English the translation is not literal. "Complex systems" in the Anglophone academic tradition carries a specific technical connotation, chaos theory, nonlinear dynamics, the Santa Fe Institute in its most mathematical register. That is part of what this program does but it is not all of it. "Systems and Decision Science" communicates the full scope: building systems, making decisions, and understanding the structures, technical, economic, institutional, cultural, within which both happen.

The two names point at the same program from different angles. Neither is the marketing version. Both are true.

Pedagogical Model

6.1 Formation, Not Teaching

The central pedagogical commitment of this program is the distinction between formation and teaching. Teaching transmits content. Formation develops judgment, character, and capability. Both are necessary. Neither is sufficient alone.

Traditional university education is optimized for teaching. Lectures, problem sets, written exams, these are efficient mechanisms for transmitting content and verifying that it has been retained. They are not effective mechanisms for developing the capacity to make good decisions under uncertainty, to build things that work, to lead teams under pressure, or to take responsibility for outcomes that affect other people.

This program is optimized for formation. The courses are necessary but not sufficient. The Studios are central. The oral defenses are central. The adversarial reviews are central. The requirement to build functional systems and defend them publicly is central. These are the mechanisms through which judgment is developed, not by being told what good judgment looks like, but by exercising it under conditions where the consequences are real and the accountability is inescapable.

6.2 The Block System

The eight-week block system is the structural expression of the formation philosophy. By concentrating attention on fewer subjects for shorter, more intensive periods, the block system creates the conditions for the kind of deep engagement that formation requires.

In a traditional semester system, a student taking five courses simultaneously must divide their attention five ways for sixteen weeks. The result is breadth without depth. The block system inverts this: three courses for eight weeks, with the Studio running continuously across two blocks. The load is informed by intensive programs such as MIT or Polytechnique, but the emphasis is on concentration and block-level accountability.

A typical week combines three courses, two long Studio sessions, a weekly progress review, lab or build time, and a decision log where each team records assumptions, AI use, tests performed, failures found, and next commitments. At the end of each block, students submit a defensible body of work; at the end of the double block, the Studio is defended before a panel.

The concrete load, in hours, is laid out below. Each course occupies between fourteen and twenty hours per week depending on character, technical or humanities, split across class, lab or discussion, and independent work. Each Studio occupies fourteen to sixteen hours per week across sixteen weeks. Three courses simultaneously plus the active Studio amount to roughly seventy hours per week, comparable to the intensity of programs such as Polytechnique or Caltech.

Component	Class	Lab/Discussion	Independent work	Weekly	Block/Studio total
Technical course (Calculus, Physics, ML, systems)	6	2	10–12	18–20	144–160
Humanities course (History, Ethics, Culture)	4	2	8–10	14–16	112–128
Studio	6	—	8–10	14–16	224–256

The block totals (8 weeks) and Studio totals (16 weeks) assume independent work is real work, not nominal self-study: technical reading, hard problems, debugging, defensible writing. The load is high and stated as such: the program is not compatible with a parallel full-time job.

The block boundaries also create natural checkpoints. Every eight weeks, a body of work must be completed and defended. There is no way to coast through a block and catch up at the end of the semester. The rhythm of production and accountability is sustained, and it is exactly this rhythm that builds the capacity to work under pressure, meet real deadlines, and produce something defensible on a fixed schedule.

6.3 The Studio System

The six Studios are the spine of the program. Each Studio runs for sixteen weeks, two consecutive blocks, and culminates in a public defense before a panel that includes people from outside the program. The Studios are not courses. They are projects with real deliverables, real teams, real constraints, and real accountability.

STUDIO I

Escritura y Oratoria, Writing and Rhetoric

Trains the fundamental communication skills that everything else in the program requires. Students cannot defend their work if they cannot write clearly and speak convincingly. Runs in Year 1, before the technical content has fully accumulated, because the communication skills must be developed early enough to be practiced throughout the rest of the program.

STUDIO II

Construir y Romper, Build and Break

Forces students to build something with a physical component, something that interacts with the world beyond the screen, and then attack what another team has built. The physical component is essential: it confronts students with the constraints that the physical world imposes on software and systems.

STUDIO III

Fiabilidad Bajo Presión, Reliability Under Pressure

Simulates operating a real system in production, defining service level objectives, managing incidents, writing postmortems, executing rollbacks. Develops operational and organizational skills: how to coordinate under pressure, how to communicate during a crisis, how to learn from failure.

STUDIO IV

Diseño de Sistemas Institucionales, Institutional Systems Design

Requires designing a system that crosses technical and institutional boundaries, a marketplace, a compliance platform, a public service. Students apply both technical depth and institutional literacy simultaneously for the first time at full scale.

STUDIO V

Sistema Crítico bajo Restricciones, Critical System Under Constraints

The most technically demanding project before the final Studio. Students build something that operates under real constraints, regulatory, financial, safety, or ethical. The constraint is the point. Building under constraints is what distinguishes a professional from a hobbyist.

STUDIO VI

Venture from Zero

The culminating Studio. Teams create and operate a real company over sixteen weeks, under genuine legal, financial, organizational, and regulatory constraints. They incorporate a company or advance as far as legally viable, build an MVP, seek real customers, validate demand, measure, iterate, and account for the decisions they made. The pedagogical justification is not startup culture or product survival: it is the integrated test of operating under real constraints, where technical design, market demand, finance, compliance, legitimacy, and leadership meet.

6.4 The Cohort as Formation Environment

The program admits 30 to 40 students per cohort. This is not a scaling constraint, it is a pedagogical requirement. Formation happens in relationship with other people. The pressure of working in a team with high expectations, the experience of defending your work before peers who understand it deeply enough to challenge it, the culture that develops when a small group of people share three and a half years of sustained intellectual pressure, these are the primary products of the small cohort, not its byproducts.

6.5 AI as Mandatory Tool

AI tools are mandatory throughout the program. Students are expected to use them constantly and fluently, for code generation, analysis, drafting, simulation, research, and anything else that accelerates their work. There is one rule, stated once and applied everywhere: you must be able to explain, defend, and take responsibility for everything you submit.

This approach reflects the program's foundational conviction: in a world where AI can produce sophisticated outputs in almost any domain, the relevant human capability is not the ability to produce outputs but the ability to evaluate, improve, and take responsibility for them.

6.6 No Electives Until the Final Semester

The program has no electives until the final semester, where one guided elective is offered. This is a design decision, not an omission. The program optimizes for cognitive coherence and a shared basis for judgment. Electives fragment that basis, they produce specialists who speak different languages too early.

The diversity of the cohort is not produced by different course choices. It is produced by subjecting people with different backgrounds and perspectives to the same rigorous common framework and observing how they make decisions under the same constraints. That is the diversity that matters for building systems.

Curriculum Overview

8.1 The Three-and-a-Half Year Arc

Año 1, Fundamentos. Year 1 builds the mathematical, scientific, and computational foundations on which everything else rests. By the end of Year 1, students can reason formally, compute, handle probability and statistics with rigor, build and deploy ML systems, program at the systems level, reason about the physical constraints on the systems they build, study living systems as complex adaptive systems, and have completed two team projects.

Año 2, Sistemas. Year 2 builds the systems, technical, economic, and institutional, within which builders must operate. By the end of Year 2, students understand algorithms and their limits, the mathematics of strategic interaction, the physics of risk and fat tails, the foundations of distributed computation, the architecture of financial systems, the political economy of regulation, historical modes of institutional failure, and the epistemological limits of AI.

Año 3, Síntesis. Year 3 integrates everything. Strategy, product, control, ethics, institutional design, negotiation, complex systems, decision theory, organizational behavior, information theory, product design, the synthesis courses where the mathematics of Year 1 and the systems of Year 2 are applied to the full complexity of building things that matter.

Año 3.5, Salida. The final semester is the closing and the opening simultaneously. Students complete Venture from Zero, take Culture, Legitimacy and Norms as a final synthesis on social acceptance, meaning, and authority, take their one guided elective, and participate in a founding seminar on AI, judgment, and responsibility, the philosophical argument of the program, encountered after three years of living it.

Why three and a half years

The 3.5-year length is intentional. The program treats undergraduate education as foundation, not specialization. Mastery of any single domain at depth, research-level economics, doctoral-grade computer science, terminal depth in any discipline, is the natural work of graduate study. Graduates of this program are explicitly prepared to compete for top international masters and doctoral programs in the disciplines they want to pursue further. The structure compresses what most programs spread across four to five years into three and a half, freeing graduates to specialize abroad while still in their early twenties. This positions the undergraduate degree as the start of a longer trajectory, not as a terminal qualification.

The Depth Model: Mastery, Literacy, and Integration

The obvious objection deserves a direct answer: no three-and-a-half-year program can produce simultaneous mastery in mathematics, physics, biology, computer science, machine learning, economics, law, politics, philosophy, product design, organizational behavior, and venture creation. The breadth is deliberate; the depth, by contrast, is calibrated honestly. The plan distinguishes explicitly between three levels of expectation, and that distinction is what makes the curricular load coherent.

Mastery. There is a bounded core of domains in which students reach genuine working depth, sufficient to build: mathematics (linear algebra, probability, optimization, abstract math), computer science (programming, systems, algorithms, distributed systems), machine learning and AI engineering, and mechanism and product design. In these domains the graduate operates as a practitioner, not as a spectator.

Literacy. A second set of domains is studied with reading depth and analytical rigor rather than with a specialist's vocation: economics and political economy, philosophy of science, cultural and institutional analysis, law and regulation, organizational behavior. The graduate can engage with the primary literature critically, evaluate arguments, and operate in interdisciplinary teams without

needing a specialist at hand for every decision. **Integration.** The Studios serve the specific function of forcing students to combine what they have mastered with what they can read, under realistic constraints. That is where breadth stops being a list of courses and becomes an effective capacity.

The model has clear precedents: École Polytechnique, Caltech, and Oxford's PPE programs each show, in their own register, how an undergraduate degree can cultivate mathematical maturity, scientific literacy, or integrative capacity without promising total specialization in every domain it touches. The program's honest claim is analogous. An MIT MSc graduate in computer science will go deeper in CS than a graduate of this program; an LSE MSc in economics will go deeper in economics. **This program's wager is different: to form someone with enough technical mastery to build, enough disciplinary fluency to integrate, and enough Studio-trained judgment to know which mode to apply when.** Those who wish to specialize further continue into graduate study (§12.2, pathway 5); that transition is not a flaw of the design but the natural trajectory of a generalist undergraduate degree oriented toward cross-domain integration.

8.2 The Full Curriculum

Año 1, Fundamentos

Bloque A	Bloque B	Bloque C	Bloque D
Álgebra Lineal y Computación I	Álgebra Lineal y Computación II	Probabilidad y Estadística	Machine Learning e Ingeniería de Modelos
Razonamiento Formal y Demostración	Microeconomía y Lógica de Decisión	Programación de Sistemas	Biología de Sistemas, Evolución y Ecología
Cálculo y Análisis	Fundamentos de Programación y Datos	Física I: Mecánica, Energía y Termodinámica	Física II: Electromagnetismo, Señales y Computación Física
<i>Studio I, Escritura y Oratoria (A+B)</i>		<i>Studio II, Construir y Romper (C+D)</i>	

Año 2, Sistemas

Bloque A	Bloque B	Bloque C	Bloque D
Algoritmos, Complejidad y Optimización	Teoría de Juegos y Diseño de Mecanismos	Redes y Sistemas Distribuidos	Economía Política, Derecho y Regulación
Econometría e Inferencia Causal	Procesos Estocásticos y Riesgo	Sistemas de Datos	Historia de las Instituciones, la Tecnología y el Poder
Deep Learning y Modelos Fundacionales	Métodos Formales y Verificación	Seguridad, Criptografía y Confianza	Epistemología, Ciencia y los Límites de la IA
<i>Studio III, Fiabilidad Bajo Presión (A+B)</i>		<i>Studio IV, Diseño de Sistemas Institucionales (C+D)</i>	

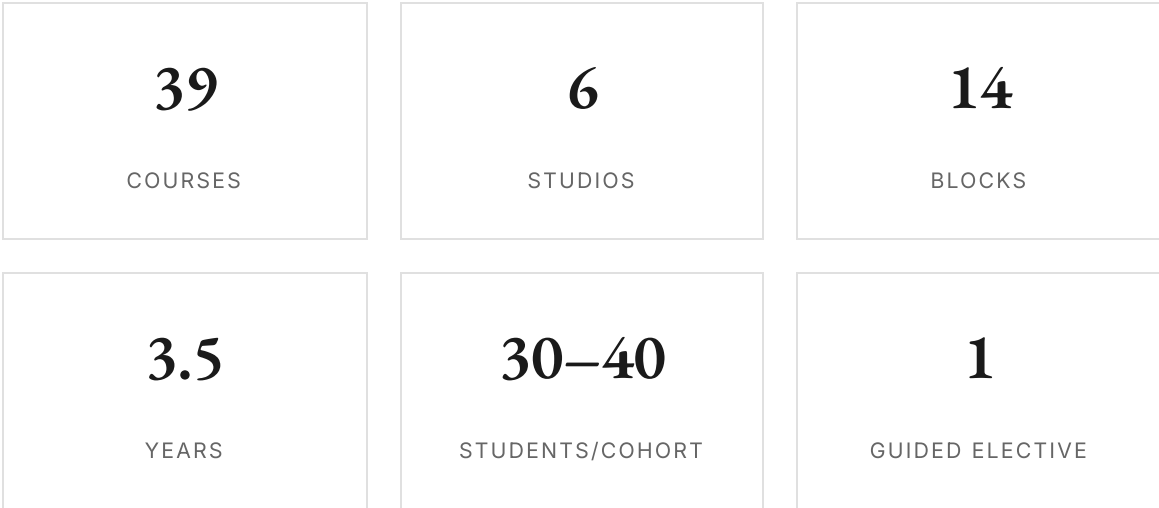
Año 3, Síntesis

Bloque A	Bloque B	Bloque C	Bloque D
Diseño y Estrategia de Producto	Laboratorio de Diseño Institucional	Sistemas Complejos	Métodos de Investigación, Medición y Diseño Experimental
Control, Observabilidad y Medición	Liderazgo, Negociación y Coordinación	Teoría de la Decisión	Finanzas, Dinero y Banca
Ética y Responsabilidad bajo Incertidumbre	Sistemas Embebidos e Interacción Física	Escritura Avanzada en Español	Optimización Aplicada y Métodos Numéricos
<i>Studio V, Sistema Crítico bajo Restricciones (A+B)</i>		<i>Studio VI, Venture from Zero (C+D)</i>	

Año 3.5, Salida

Bloque A	Bloque B
Seminario Fundacional: IA, Juicio y Responsabilidad	Venture from Zero, continuación y cierre
Cultura, Legitimidad y Normas	Seminario de Egreso: El Constructor en el Mundo
Electiva Guiada	Defensa Pública Final

8.3 Program Statistics



Studio Descriptions

Studios are the spine of the program. They are not courses. They are sixteen-week projects with real deliverables, real teams, real constraints, and real accountability. All Studios culminate in a public defense before a panel that includes external reviewers.

STUDIO I, AÑO 1, BLOQUES A+B

Escritura y Oratoria / Writing and Rhetoric

OBJETIVO / OBJECTIVE

To formally train the written and oral communication skills on which everything else in the program rests.

Concrete example. A 4000-word essay arguing a contested position on AI governance, with full revision history (drafts, peer feedback, rewrites) and a recorded oral defense before a panel that includes at least one external reviewer.

ESTRUCTURA / STRUCTURE

Writing emphasis in the first eight weeks. Oral emphasis in the second eight weeks. Both practiced throughout. Material comes from courses being taken simultaneously: students write and present about real content, not abstract exercises.

ENTREGABLES / DELIVERABLES

- Portfolio of rewritten essays with complete revision history: original drafts, feedback received, rewrites
- Recorded oral presentations with self-evaluation

- Accountability memo on claims, evidence used, and limits of what the team can defend
- Final oral defense without notes

EVALUACIÓN / EVALUATION

WP, Written portfolio with revision history

Recorded presentations with self-evaluation

CRITERIOS / CRITERIA

- Clarity of argument and traceability of evidence
- Ability to recognize uncertainty and limits
- Responsibility for claims that affect others

PROGRAMAS DE REFERENCIA / REFERENCE PROGRAMS

Stanford PWR Program in Writing and Rhetoric · MIT CI-H
Communication Intensive · Harvard Bok Center Writing Program

STUDIO II, AÑO 1, BLOQUES C+D

Construir y Romper / Build and Break

OBJETIVO / OBJECTIVE

Build a system with a mandatory physical component. Another team attacks it. Roles rotate.

Concrete example. A working sensor + actuator system that responds to a physical input, for example a moisture-sensing irrigation controller for a public park, accompanied by a threat model documenting at least three failure modes and a postmortem written by the team that attacked it.

ESTRUCTURA / STRUCTURE

Teams of 4-5 students. One team builds, another attacks. Roles rotate at the midpoint. The physical component is mandatory: the system must measure, move, or interact with something tangible. AI assists both sides.

ENTREGABLES / DELIVERABLES

- Specification document
- Test plan
- Functional prototype with physical component
- Measurement log
- Threat model
- Incident report
- Failure report
- Postmortem and team retrospective

EVALUACIÓN / EVALUATION

PD, Public defense of functional system

CRITERIOS / CRITERIA

- Match between specification, tests, and observed behavior
- Quality of measurement and instrumentation
- Explicit treatment of failure modes, affected users, and physical risks

PROGRAMAS DE REFERENCIA / REFERENCE PROGRAMS

MIT 6.S08 Interconnected Embedded Systems · Caltech ME/EE 75
Projects in Experimental Engineering · UCL Integrated Engineering
Programme

STUDIO III, AÑO 2, BLOQUES A+B

Fiabilidad Bajo Presión / Reliability Under Pressure

OBJETIVO / OBJECTIVE

Operate a system under simulated production conditions. Define SLOs, build monitoring, manage incidents, execute rollbacks, write postmortems.

Concrete example. A monitored web service running for 8 weeks under simulated production load, with explicit SLOs, an on-call schedule, at least one staged incident with a written postmortem, and a rollback procedure documented and rehearsed.

ENTREGABLES / DELIVERABLES

- Service Level Objectives (SLOs)
- Reliability test plan
- Monitoring dashboard
- Incident logs
- Documented and rehearsed rollback procedure
- Postmortems
- Team coordination retrospective

EVALUACIÓN / EVALUATION

PD, Defense simulating a post-incident review

CRITERIOS / CRITERIA

- Realism of SLOs and alerts
- Quality of incident response and communication with affected users
- Technical honesty of the postmortem and preventive measures

PROGRAMAS DE REFERENCIA / REFERENCE PROGRAMS

Google Site Reliability Engineering methodology · MIT distributed systems labs

STUDIO IV, AÑO 2, BLOQUES C+D

Diseño de Sistemas Institucionales / Institutional Systems Design

OBJETIVO / OBJECTIVE

Design a system that crosses technical and institutional boundaries. AI simulates the behavior of regulators, attackers, and users.

Concrete example. A complete institutional design document for a real-world problem, for example a digital identity system for a hypothetical municipal government, including incentive analysis, stakeholder map, regulatory feasibility assessment, and a red-team review by another team.

ENTREGABLES / DELIVERABLES

- Requirements document
- Incentive analysis
- Stakeholder and affected-user map
- Partial formal specification
- Monitoring plan
- Abuse and institutional-capture analysis
- Financial viability assessment
- Public defense

EVALUACIÓN / EVALUATION

PD, Public defense before panel including practitioners from the relevant institutional domain

CRITERIOS / CRITERIA

- Coherence between technical design, incentives, and institutional constraints
- Treatment of legitimacy, affected stakeholders, and possible abuses
- Operational, financial, and regulatory viability

PROGRAMAS DE REFERENCIA / REFERENCE PROGRAMS

Oxford Blavatnik School of Government capstone projects · Harvard Kennedy School policy exercises

STUDIO V, AÑO 3, BLOQUES A+B

Sistema Crítico bajo Restricciones / Critical System Under Constraints

OBJETIVO / OBJECTIVE

Design and partially build a system that operates under real constraints, regulatory, financial, safety, or ethical. The constraint is the point.

Concrete example. A partially-implemented critical system, for example a vote-tallying protocol or a financial settlement mechanism, with formal verification of at least one property, a hazard analysis, a budget plan, and a red-team report that the team responds to.

ENTREGABLES / DELIVERABLES

- Hazard analysis
- Verification plan
- Test matrix
- Safety margins
- Monitoring design
- Red team report
- Budget and resource plan
- Revised design responding to red team findings
- Team retrospective

EVALUACIÓN / EVALUATION

PD, Public defense with red team findings as adversarial input

CRITERIOS / CRITERIA

- Rigor of verification and test evidence
- Explicit treatment of failure consequences and affected users
- Technical response to adversarial findings and safety limits

PROGRAMAS DE REFERENCIA / REFERENCE PROGRAMS

MIT capstone engineering projects · Caltech senior thesis projects · UCL IEP final projects

Venture from Zero / Venture from Zero

OBJETIVO / OBJECTIVE

Create a real company over 16 weeks, under genuine legal, financial, organizational, and regulatory constraints. This is not a simulation. Teams legally incorporate a company, build an MVP, find real customers, sell or demonstrate verifiable demand, get paid where appropriate, measure, iterate, and account for the decisions they made. The pedagogical justification is not startup culture but the integrated test of operating under real constraints.

Concrete example. A legally incorporated company with a functional MVP, interviews and evidence of real demand, first customers or pilots, financial model, initial cap table, written decision log, and a pitch defended before a panel including investors, entrepreneurs, and technical reviewers.

ESTRUCTURA / STRUCTURE

The first weeks cover the operational mechanics of company creation: incorporation, cap table, fundraising, first customers, basic accounting, compliance, taxes. These are not taught in the abstract: they are executed immediately as part of launching the venture. The Studio integrates everything learned in three years: technical skills, design, institutions, finance, communication, and leadership.

ENTREGABLES / DELIVERABLES

- Incorporated company (or in process)
- Functional MVP
- Evidence of real demand: paying customers, pilots, letters of intent, or documented usage
- Updated financial model, initial cap table, and documented decision log
- Operational checklist: accounting, compliance, taxes, support, and responsibilities

- Legal, financial, technical, and reputational risk register
- AI usage report
- Red team report by peers
- Complete postmortem
- Final public defense before technical, institutional, entrepreneurial, and investor reviewers

EVALUACIÓN / EVALUATION

PD, Final public defense before investors, entrepreneurs, and technical or institutional reviewers

CRITERIOS / CRITERIA

- Verifiable evidence of demand and learning
- Legal, financial, operational, and AI-use accountability
- Legitimacy of the venture before customers, affected users, and external reviewers

PROGRAMAS DE REFERENCIA / REFERENCE PROGRAMS

Y Combinator Startup School · Stanford CS 183 Startup · MIT delta v accelerator · Entrepreneur First

Admissions

11.1 Who This Program Is For

This degree is not for everyone. It is for a specific kind of person: someone who finds traditional disciplinary boundaries frustrating rather than comforting. Someone who has already built something, a piece of software, a community, a business, an argument, and wants to understand more deeply why it worked or failed. Someone who reads across fields without being asked to. Someone who is honest about what they don't know and precise about what they do. Someone who wants to operate in the world, not just describe it.

The cohort is deliberately small, 30 to 40 students per entering class. This is not a scaling constraint. It is a pedagogical requirement. Formation happens in relationship with other people. The culture that develops when a small group of people share three and a half years of sustained intellectual pressure cannot be replicated at scale.

11.2 The Three-Stage Selection Process

Stage 1, Written Application

Two essays. The first describes a system the applicant has observed, built, or broken, anything from a neighborhood to a piece of software to a family business. The evaluators are looking for the ability to see structure, identify failure modes, and reason about causality. The second addresses what they believe AI changes and what it does not. This filters for people who have actually thought about the founding premise of the program rather than just wanting a prestigious degree. Academic records are reviewed as context, not as the primary filter.

Stage 2, Quantitative and Logical Examination

A purpose-built three-hour exam. Four sections:

- **Mathematical reasoning and estimation**, order-of-magnitude problems, logical deduction, combinatorial thinking, basic probability. Tests how someone thinks, not what they have memorized.
- **Formal reasoning**, logical puzzles, argument analysis, identifying invalid inferences.
- **Computational thinking**, no syntax required. Pseudocode, algorithmic thinking, debugging a described process.
- **Analytical reading**, a short dense text, scientific or philosophical, followed by questions requiring extraction of the argument, identification of assumptions, and evaluation of evidence.

The exam does not assume that all applicants have had reliable high-school calculus. It does require fluency with elementary algebra, functions, symbolic manipulation, estimation, proportional reasoning, graph reading, and mathematical reasoning. The program owns calculus from the first block; admissions verifies that the student can enter that pace without turning the first year into remediation.

Stage 3, Oral Interview

Thirty minutes. Two interviewers minimum.

- **Ten minutes defending the written essay**, interviewers push back, propose counterexamples, ask what was missed. Tests intellectual honesty and comfort with not knowing.
- **Ten minutes on a live problem**, a scenario with incomplete information, reasoning out loud. Could be a Fermi estimation, a system design question, an ethical dilemma. The answer is not the point. The thinking is.
- **Ten minutes of genuine conversation**, what they are reading, what problem obsesses them, what they have built.

11.3 What the Process Selects For

The process is designed to find people who reason precisely under uncertainty, are honest about what they don't know, think about systems naturally, and have some evidence of making or building things. Secondary school grades are one signal among many. Some of the best applicants will have uneven academic records because they were spending their time building things. The process is designed to find them.

11.4 No CBC

Students admitted to this program do not pass through the CBC. The program's selective admissions process, with its three stages and its explicit requirements for mathematical reasoning and computational thinking, serves the same function as a foundational year, ensuring that admitted students arrive with the prerequisites for the program's demanding first year. Calculus is not delegated to secondary school or to the CBC: it is taught inside the degree from Year 1, Block A, but on a base of reasoning and algebra that admissions must verify.

Graduate Profile

12.1 What Graduates Can Do

A graduate of this program can:

- Identify a real problem and frame it with precision
- Build a functional solution with code, mathematics, and institutional design
- Build, deploy, and evaluate ML and AI systems
- Design products that people actually use
- Read a balance sheet, model a business, and create a company
- Design incentive structures and institutional architectures
- Reason about physical and biological constraints on systems
- Recognize complexity patterns across domains
- Question the epistemic foundations of their own models
- Negotiate, persuade, and build coalitions without formal authority
- Lead teams and make unpopular decisions
- Write with clarity and speak with conviction in Spanish and English
- Use AI to move fast without losing judgment
- Navigate regulatory and political environments
- Reason about ethical obligations and assign responsibility
- Launch things, measure results, and correct course
- Take responsibility when it matters

12.2 Where Graduates Go

The program does not produce a single career type; it produces a formation that finds expression in several ways. The five pathways below are not curricular tracks, all students take the same program, but the occupational profiles that the formation naturally prepares for. Most graduates will move between two or more over the course of their careers.

One of the most common and deliberately prepared pathways is continuing into graduate study abroad. The 3.5-year structure is designed to free graduates into top international masters or doctoral programs while still in their early twenties, where they can deepen at research level in the discipline they choose. That deepening is not a side outcome of the program's design, it is the trajectory the design anticipates.

1. Founders and operators of technical companies

Creating companies that combine technical depth with organizational discipline. Studio VI, Venture from Zero, is the direct preparation: legal incorporation, MVP, first customers, fundraising. The strategy, product, organizational behavior, negotiation, finance, product design, and data systems courses provide the operational base; Algorithms, ML, Deep Learning, Systems Programming, and Distributed Systems provide the technical depth for building what the company requires. Typical destinations: startup founders, early technical hires at early-stage companies, operators scaling products.

2. Technical and product leadership in AI-heavy organizations

Roles where deciding what to build and how to build it is as critical as the implementation itself. The Deep Learning and Foundation Models, Epistemology and Limits of AI, Decision Theory, Product Design, and Data Systems courses provide the technical and conceptual vocabulary to lead AI teams without losing judgment about what those systems can and cannot do. Typical destinations: technical leads at software companies, product managers on AI platforms, ML team leads, architects of critical systems.

3. Institutional design and public-sector modernization

Working in or with the state to design mechanisms, regulations, and services that work. Studio IV, Diseño de Sistemas Institucionales, is the direct preparation. The Political Economy and Regulation, Institutional Design Laboratory, Game Theory and Mechanism Design, Culture and Legitimacy, and History of Institutions courses provide the analytical frame; the technical courses provide the capacity to reason about the systems the state has to regulate or build. Typical destinations: state digital modernization teams, regulatory agencies with a technological dimension, international organizations, technically-grounded policy consultancies, foundations that design mechanisms.

4. Financial, infrastructure, and risk systems

Building and operating systems where failure costs are high and fat-tailed distributions matter. The Stochastic Processes and Risk, Finance Money and Banking, Control Observability and Measurement, Data Systems, Security and Cryptography, Formal Methods and Verification, and Networks and Distributed Systems courses form the base. Studio III, Reliability Under Pressure, trains operation under real production conditions; Studio V, Critical System Under Constraints, trains design under regulatory or safety constraints. Typical destinations: financial infrastructure engineering, quantitative analysts with fat-tail discipline, reliability and critical-infrastructure teams, risk management at central banks or regulators, fintechs with an infrastructure component.

5. Research and graduate study

Continuing into graduate programs or entering research groups in complex systems, machine learning, decision science, computational political economy, technically-grounded public policy, or philosophy of AI. The Year 1 mathematical and scientific depth, the Studios as applied research practice, and the program's interdisciplinary orientation prepare graduates particularly well for master's and doctoral programs at the intersection of several disciplines, the places where

narrow disciplinary training hits its limits. Typical destinations: master's and doctoral programs in CS, ML, economics, public policy, complex systems, decision science, and philosophy of science, in Argentina and abroad.

What these pathways share is not a sector or a title. It is the capacity to operate at the level of complexity that the post-AI world demands and the willingness to take responsibility for the outcomes.

12.3 The Long-Term Bet

This program is a bet on a specific future: that the most important work of the next fifty years will be done at the intersection of technology, institutions, and power, and that the people capable of doing that work need a formation that does not currently exist.

Latin America is systematically underrepresented in the global conversation about artificial intelligence, institutional design, and the governance of technological change. The frameworks being developed to govern AI are being designed primarily elsewhere. This program is, among other things, a contribution to changing that, not by producing people who analyze the problem, but by producing people who build the solutions.

This is not a degree for people who want to study systems. It is a degree for people who want to build them.