

Master in

INFORMATION TECHNOLOGY GOVERNANCE

CONTEXT AND RELEVANCE

Information technology (IT) is rapidly expanding in every sphere of society. The gap between enterprises using the enormous potential of IT benefits and those which are not aware of their solutions, disregard them or consider that accessing them is not feasible is increasingly growing. To cope with this situation, enterprises must introduce Information Technology Governance, that is, “processes that ensure the efficient and effective use of IT to achieve organization’s goals”. Thus understood, information technology governance is part of the senior leadership of enterprises and requires qualified professionals in charge.

The main international comparative indexes of competitiveness and IT use show that Mexico lags very far behind. With this master’s degree, Universidad Iberoamericana Ciudad de México wishes to contribute to address the need of qualified professionals skilled in effective governance of information technology, thus collaborating to increase enterprises’ productivity.

Mexican enterprises need to harness IT advances to be able to achieve development levels comparable to those of the leading countries of the world, boosting the development of a socially equitable and highly productive economy. For this to happen, enterprises have to transform themselves into responsible and transparent organizations, adopting international good practices. Hence the relevance of a Master’s program to form IT experts, able to insert good practices at the highest level of the organization and impact the optimization of processes, risk management, business continuity, safety, cost reduction and competitiveness.

The Master’s in Information Technology Governance (MGTI) is designed to form experts qualified to occupy high leading positions within companies, managing and regulating the information systems established by the enterprise to achieve its objectives.

The program is fueled by the Information Technology Governance Chair, established with the support of Consultoría Estratégica de Tecnología de Información, S.A. de C.V. (ConsETI).

M



LINKAGE

The Program has multiple formal and informal avenues of collaboration and exchange with institutions, and national and foreign centers, for both students and professors. We underscore the following links:

- *Asociación Latinoamericana de Profesionales de Seguridad de la Información (ALAPSI)*
- *Asociación Mexicana de Empresas de Software Libre (AMESOL)*
- *Asociación Mexicana de la Industria de Tecnología de Información (AMITI)*
- *Asociación Nacional de Instituciones de Educación en Tecnologías de la Información (ANIEI)*
- *Cámara Nacional de la Industria de la Transformación (CANACINTRA)*
- *Global Lynx*
- *IBM*
- *International Institute of Business Analysis (IIBA)*
- *itSMF International (IT Service Management Forum, ITSMF)*
- *Microsoft*
- *Project Management Institute (PMI)*
- *Secretaría de la Defensa Nacional (SEDENA)*
- *Toastmasters*

Collegial bodies (Advisory Boards and Technical Councils) are integrated by the presidents of organisms, associations and institutions from the field of Information Technology, such as: ISACA, Open Group, PMI, itSMF, TOASTMASTERS, ALAPSI, ANIEI, among others.

OBJECTIVES

General

To train professionals capable of establishing Information Technology Governance strategies based on international standards to strengthen the objectives of the institutions in a framework of respect for the human factor.

Specific

To train professionals capable of:

1. Identifying and assessing the best practices in information safety, allowing organizations to accomplish their IT risk acceptance process.
2. Integrating IT and corporate governance to achieve sustainable productivity.
3. Using international IT governance methodologies and standards to implement successful project leadership.
4. Analyzing IT international standards applied to systems, computer and information science projects.

APPLICANTS PROFILE

Students with a B.A. in Engineering, Computer Science and Information Sciences or related fields, preferably with experience in management of information systems, computer and information science areas in industries, service companies or government institutions.

GRADUATES' PROFILE

The graduate from the Master's of Technology Information Governance is a professional capable of integrating: design, management, development, deployment, and operation of the IT service, as well as aligning the corporate governance structure, to achieve competitive positions in a globalized, complex and dynamic environment.

FIELD OF WORK

Graduates may pursue their careers in small, medium and large enterprises, including municipal, state, and federal government agencies, industrial, banking, manufacturing, agricultural, energy, social, health, and telecommunications sectors.

RESEARCH CHAIR

The Information Technology Governance Chair was created harnessing the experience acquired by the Engineering Department, which fosters the mobility of researchers, professors and students, building study and graduate education networks in this discipline. It generates theoretical and methodological strategies fostering the articulation of the Master's Program to build IT Governance culture. The following topics are addressed:

- **Information Security:** data privacy, mobile devices safety, ethical hacking, corporate information security governance.
- **IT Auditing:** auditing of systems lifecycle, operating systems, overall computer controls, management of IT function, COBIT application.
- **IT Risk Management:** identify and analyze risks, assess, prioritize, and manage risks, ISO 31000 application.
- **IT Services Management:** service design, transition and operation; use of ITIL.
- **Business Continuity:** ISO 22301 business continuity management.
- **Entrepreneurial Architecture:** organizational innovation, administrative restructuring, business process management and ISO 22000 impact; use of Arquimet 2.0 structural design software.
- **IT leadership:** forms Technology Information CEOs, developing abilities and capabilities based on human development issues, coaching, happiness at work, work groups, and emotional intelligence.
- **IT Economy and Finances:** investment benefits methodologies, costs and risks; use of Val IT framework, and EVC (Economic Value Creation) metrics.

FACULTY MEMBERS

Faculty of this applied graduate program is comprised by professors with acknowledged trajectories and a common professional interest. Professors are professionally active in their field of expertise, and teaching is not their main work; nevertheless, the master’s program has a coordinator with the following profile:

M.Sc. Pedro Fernando Solares Soto

M.Sc. in Information and Communication Technologies Governance, Universidad de Deusto.

M.Sc. in IT Services Management, Universidad Iberoamericana.

B.Sc. in Cybernetic and Computers Systems Engineering, Universidad La Salle.

Lines of Research:

History of Present Time: Marks of Memory, Spheres of Experience and History of Emotions.

Relevant Publications:

Gobierno Digital: dificultades y facilidades para su implementación (with Flor Rodríguez). Ciencias de la Tecnología de Información Handbook T-I, de María Ramos Escamilla y Pedro Fernando Solares-Soto, Eds. ECORFAN-México. http://www.ecorfan.org/handbooks/Ciencias-TI-T_I/IBERO%20Handbook_MR_1.pdf / “Gobierno y riesgos de TI”. Gobierno de tecnología de información, Tópicos Selectos de Ingeniería (M. Ramos, P. Solares, E. Romero, eds.). ECORFAN-Bolivia. Sucre, 2014. 39-54 / “Tecnologías de Información en el sector salud (TISS)” (with Carlos Zamora Sotelo). Proceedings T-I de ECORFAN de las Ciencias de la Tecnología de Información. Ciudad de México.

Contact: pedro.solares@ibero.mx

ADMISSION PROCEDURES

The following documents must be delivered to the School Services Directorate (Building N)

- Original birth certificate
- Simple photocopies of university degree and professional license, or evidence of graduating from M.A. Copies will be verified against original documents
- Course subjects Application
- Application form (provided by School Service Directorate along with new admission instructional materials)
- Letter of Acceptance to the Graduate Program
- Letter of Commitment and Addendum duly completed and signed (provided with the first entrance instructional material by School Service Directorate)
- Application process payment receipt
- Take the EXANI III exam

For further information please contact:

pedro.solares@ibero.mx

SYLLABUS

1ST SEMESTER

Corporate Governance and Social Responsibility
—
2 Hours / 4 Credits

Information Technology Service Management
—
2 Hours / 4 Credits

Research Seminar
—
2 Hours / 4 Credits

Information Technology Financial Engineering
—
2 Hours / 4 Credits

2ND SEMESTER

Information Technology Project Management
—
2 Hours / 4 Credits

Information Technology Risk Management
—
2 Hours / 4 Credits

Information Technology Auditing
—
2 Hours / 4 Credits

IT Evaluation and Funding
—
2 Hours / 4 Credits

SUMMER

IT Human Factor Seminar
—
3 Hours / 6 Credits

Elective
—
3 Hours / 6 Credits

3RD SEMESTER

High Tech Enterprise Management
—
2 Hours / 4 Credits

Information Technology
—
2 Hours / 4 Credits

IT Certifications and Standards
—
2 Hours / 4 Credits

Elective
—
2 Hours / 4 Credits

SUMMER ELECTIVES

- Decision Making Quantitative Methods
- Information Technology Standards and Legislation
- Information Technology Topics

3RD SEMESTER ELECTIVES

- Organizational Human Development
- Human Development Seminar



IBERO
Ciudad de México • Tijuana