100% Online | 20 Months | 30 Credits | WASC Senior College and University Commission | University of San Diego

Master of Science in Information Technology Leadership

PROGRAM OVERVIEW

If you're looking to advance your IT career, you need to progress beyond specializing in a particular skill set or acquiring specific technical knowledge. Too often, graduates of IT programs are trained in skills that allow them to succeed within their specialization, but not in the practices and perspectives that allow them to excel as leaders. If you want a career at the higher levels of information technology, then you must have the ability to analyze, rethink, redesign and automate intricate IT systems to achieve an organization's strategic goals.

The University of San Diego's 100% online Master of Science in Information Technology Leadership (MS-ITL) is designed to prepare current and future IT leaders in effectively understanding and managing these complex systems. No matter the industry or organization, as a graduate of our program you'll be able to develop and articulate comprehensive solutions to large scale information technology challenges.

PROGRAM GOALS

- Demonstrate mastery over the fundamental building blocks of information technology solutions: data and voice networking, security, data management and reporting, enterprise applications (e.g., Workday, Salesforce), and server operations (e.g., AWS, Azure).
- Evaluate proposed and implemented information technology solutions from different angles within a variety of frameworks.
- Critically analyze existing information technology systems as well as IT solutions proposed by clients, internal customers, or vendors, assessing requirements and resources (human, financial, and technical).
- Design (or Develop) and implement information technology solutions responsive to organizational requirements, aligned with resource constraints and strategic goals.
- Communicate effectively with stakeholders in order to accurately characterize problems to be solved within the context of strategic goals and available resources.
- Evaluate the ethical implications of proposed and implemented information technology solutions.

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COURSE DESCRIPTIONS

MS in Information Technology Leadership

University of San Diego ONLINE

ITL 592: NEW STUDENT ORIENTATION

This orientation course introduces students to the University of San Diego and provides important information about the program. Throughout the orientation, students will learn to successfully navigate through the online learning environment and locate helpful resources. Students will practice completing tasks in the online learning environment as preparation for success in their graduate courses. This orientation course will be available to students as a reference tool throughout the entirety of your program

ITL 501: FUNDAMENTALS FOR IT LEADERSHIP

Introduction to the IT leadership program. Understanding an organization's (your own or a customer's) mission, resources, and constraints. Application of Conway's Law and Allison's Organizational Process Model to IT. Introduction to communicating effectively with non-technical executive leadership: verbally, through email and other written forms of communication, and through presentations. Examination of different IT governance models and how to apply them.

ITL 502: PROJECT, VENDOR AND CONSTRUCTION MANAGEMENT

Information technology projects operate in an environment where information moves rapidly and expectations continually evolve. Although project management is a well-established discipline, managing IT-driven initiatives requires approaches that extend beyond traditional project management methods. Because both technology and industry practices change quickly, professionals must continuously adapt their strategies and decision-making frameworks. This course integrates project management theory with real-world application to provide a practical, contemporary understanding of managing IT projects. Students will develop advanced skills in planning, executing, and controlling projects, with an emphasis on managing schedules, costs, quality, vendors, and resources across the project lifecycle.

PROGRAM DETAILS

- 30 units completed in 20 months
- Part-time program: 2 courses per term, 1 course at a time, 7 weeks for each course
- $925 per unit
- New students start this program in Spring (January), Summer (May) or Fall (September)

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ITL 520: DATA AND VOICE NETWORKING

This course covers the role of wired and wireless networking in the architecture, deployment, and management of large-scale information technology environments. Includes advanced topics such as networking in cloud environments (e.g. AWS), edge data, and private wireless networks.

ITL 525: SERVER OPERATIONS

Server operations with emphasis on design and deployment of large-scale computing environments using on-premises data centers and cloud services (e.g., Amazon Web Services, Google Cloud Platform, Microsoft Azure, Oracle Cloud). Examination of the technical, financial, privacy, legal and international aspects of SaaS, IaaS, PaaS, server-based and serverless computing. The course includes hands-on experience in a sandbox environment in which students configure a computing environment and deploy services using the functions as a service (FaaS) paradigm.

ITL 530: DEV OPS

Explores the critical role of IT leadership in orchestrating the continuous lifecycle of software engineering, staging, and production deployment. This course integrates Agile methodologies, containerization, and security to build resilient delivery pipelines. Students evaluate performance using modern DORA metrics and investigate the emerging frontiers of DataOps, MLOps, and AIOps. The course culminates in a strategic Software Factory Proposal, designed to streamline organizational workflows and avoid project failure through automated, scalable, and data-informed practices.

ITL 535: CYBERSECURITY

This course will feature a comprehensive overview of concepts and tools essential to cybersecurity for IT professionals. Students will learn to view information as an asset to the organization, discover types of cybersecurity attacks, what threat actors are, the various roles of a cyber professional, and the beginnings of designing a cybersecurity program. Students will also identify different threats to information and the infrastructure and operators that support it. This course will also cover the risk management practices and principles that pertain to the cyber domain, as well as risk mitigation strategies, risk calculation, and communication and training for a cybersecurity program.

ITL 540: SERVICE MANAGEMENT

IT Service Management (ITSM) encompasses the activities by which IT organizations manage the end-to-end delivery of services to customers. ITL 540 covers the principles and practices of ITSM using industry standards and best practices, including ITIL, with emphasis on data-driven and AI-enabled service operations. Topics include Incident, Problem, and Service Request Management; Change Control; Service Catalog and Portfolio Management; Service Level and Continuity Management (Disaster Recovery and Business Continuity); Knowledge Management; and IT Asset and Service Configuration Management. The course focuses on practical skills, modern tooling, and decision-making to prepare graduates to lead IT service teams in increasingly automated and intelligent service environments.

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ITL 545: ENTERPRISE APPLICATIONS, DATA MANAGEMENT AND REPORTING

In today's competitive business environment, the ability to effectively manage enterprise applications and leverage data is a critical driver of organizational success. This course provides participants with a comprehensive understanding of how Enterprise Applications support business processes, enhance productivity, and drive innovation. The course addresses the full spectrum of Enterprise Data Management and Reporting with insights into designing and implementing Data Warehouses, Data governance, optimizing Business Intelligence tools, Advanced Analytics, and ensuring compliance with Data Security and Data privacy standards. The course also emphasizes the importance of seamless integration and interoperability between enterprise applications, in helping organizations streamline processes and enhance decision-making capabilities.

By the end of this course, participants will be well-equipped to harness the power of data and enterprise applications to achieve strategic objectives and drive enterprise-wide transformation.

ITL 590: THE IT PROFESSION

This course focuses on a big-picture overview of the economic and social role of IT professionals. IT professionals are a strategic workforce in the US and in every other technologically developed economy but do not have a strong sense of collective professional identity. How have other technical professions (e.g. mechanical, chemical, and electrical engineers) historically developed a collective sense of professional identity and obligation, and in what ways are IT workers similar to and different from them? In what ways are IT professionals designers, and what does this imply about their broader social and professional obligations?

ITL 595: CAPSTONE PROJECT

As the culmination of the IT Leadership program, this capstone course requires students to synthesize and apply the collective knowledge gained throughout their prerequisite coursework. Students will lead an initiative to develop a comprehensive, industry-specific, IT Audit preparation document. This process demands the integration of technical proficiency, risk governance, and operational strategy to evaluate organizational readiness. Students must demonstrate executive-level maturity by translating complex technical findings into a formal recommendation that aligns with an organization's mission and constraints, effectively bridging the gap between technical execution and C-suite decision making.

Prerequisites: ITL 501, ITL 502, ITL 525, ITL 530, and ITL 540

EXPERT FACULTY

Our MS-ITL faculty has extensive experience in the IT industry — and many continue to work in the field as well as in higher education. Every faculty member is dedicated to teaching the fundamental knowledge and leadership skills required for successful IT leadership. Together, they bring a diverse set of experiences, skills and backgrounds to the program.

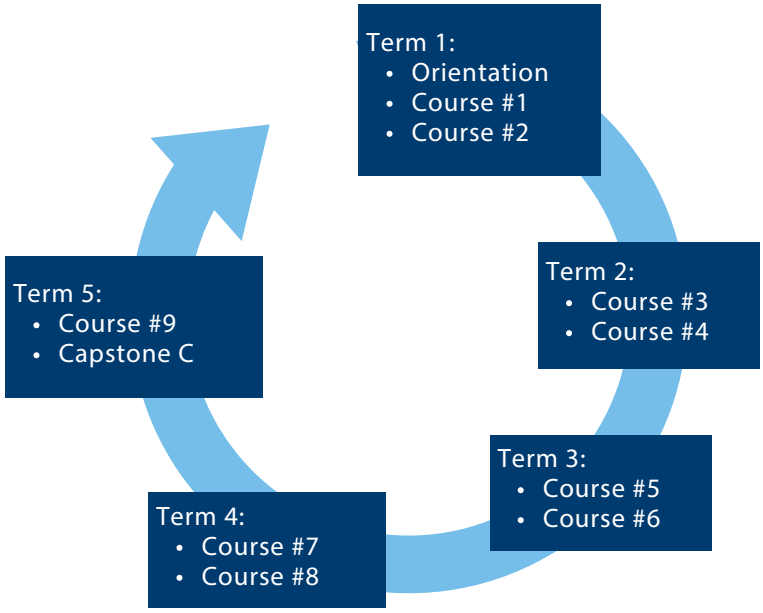
UNDERSTANDING THE COURSE CAROUSEL

Courses in the MS-ITL program are scheduled on a carousel, which allows new students to start at any time. All students will take foundational courses during their first term, which will prepare them for the courses to follow.

The academic year is comprised of three 14-week terms, with breaks from one to three weeks between each term:

- Fall - courses start in August or September
- Spring - courses start in January
- Summer - courses start in May

Students will take two 7-week courses each term. Courses are offered sequentially.



FREQUENTLY ASKED QUESTIONS

Do I need an undergraduate degree in IT or a related field?

MS-ITL applicants don't need an IT degree, but they must have a bachelor's degree (BS or BA) from an accredited institution. It is preferable to have at least two years of work experience in the information technology field.

Is a GRE required for admission?

Candidates who have a GPA above 2.75 are not required to take a GRE; however, a standardized test such as GRE is recommended for applicants with a GPA under 2.75.

What kind of IT experience do you need to have for this program?

Applicants should have at least two years of experience in an IT-related field, such as network and systems support, server operations, DevOps, etc. Examples of relevant experience can include computer user support specialists, database administrators and architects, computer systems analysts, and network and computer systems administrators.