

INFORMATION TECHNOLOGY LEADERSHIP (TL)

ITL 501 | FUNDAMENTALS FOR IT LEADERSHIP

Units: 3 Repeatability: No

Introduction to the IT leadership program. Spotlights on fundamental financial management concepts: expense, capital, depreciation, budgets, etc. Understanding an organization's (your own or a customer's) mission, resources, and constraints. Introduction to communicating effectively with non-technical executive leadership: verbally, through email and other written forms of communication, and through presentations. IT governance models.

ITL 502 | PROJECT, VENDOR, AND CONSTRUCTION MANAGEMENT

Units: 3 Repeatability: No

Project Management is the application of knowledge, skills, tools and techniques to project-oriented activities to meet project requirements. In today's fast paced business environment, now more than ever, organizations are faced with competing aggressively with one another, and so the demand for operational effectiveness and efficiency becomes essential to organizational success.

ITL 520 | DATA AND VOICE NETWORKING

Units: 3 Repeatability: No

Prerequisites: ITL 501 with a minimum grade of C- and ITL 502 with a minimum grade of C-

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

Units: 3 Repeatability: No

Prerequisites: ITL 501 with a minimum grade of C- and ITL 502 with a minimum grade of C-

Server operations with emphasis on design and deployment of large-scale computing environments using cloud services (e.g., Amazon Web Services, Google Cloud Platform, Microsoft Azure, Oracle Cloud). Topics include hyperconverged infrastructure and AWS networking. The course includes hands-on experience in a sandbox environment in which students configure a computing environment and deploy services using the infrastructure as code (IaC) paradigm.

ITL 530 | DEVOPS

Units: 3 Repeatability: No

Prerequisites: ITL 501 with a minimum grade of C- and ITL 502 with a minimum grade of C-

The role of IT in the continuous process of software development (engineering), staging (QA), and production deployment (IT operations). Incorporates web development, app development and integration, and how to avoid a failed development project. Case study spotlight: USD MySDMobile app.

ITL 535 | CYBERSECURITY

Units: 3 Repeatability: No

Prerequisites: ITL 501 with a minimum grade of C- and ITL 502 with a minimum grade of C-

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 | IT SERVICE MANAGEMENT

Units: 3 Repeatability: No

Prerequisites: ITL 501 with a minimum grade of C- and ITL 502 with a minimum grade of C-

IT Service Management (ITSM) is the set of activities by which IT organizations manage the end-to-end delivery of IT services to customers. ITL 540 covers the principles and practices of ITSM using industry standards and best practices, such as ITIL. Course topics include comprehensive coverage of Incident Management, Problem Management, Service Request Management, Change Control, Service Catalog Management, Portfolio Management, Service Level Management, Service Continuity Management (Disaster Recovery and Business Continuity), Knowledge Management, and IT Asset Management and Service Configuration Management. This course emphasizes developing practical skills and preparing graduates to effectively lead IT service teams.

ITL 545 | ENTERPRISE APPLICATIONS, DATA MANAGEMENT, AND REPORTING

Units: 3 Repeatability: No

Prerequisites: ITL 501 with a minimum grade of C- and ITL 502 with a minimum grade of C-

This course covers topics including overviews of major enterprise applications such as Salesforce, WorkDay, Oracle Financials, and SAP, with a particular emphasis on implementation projects; reporting tools, data warehousing, and organizational dynamics (politics) of data access. Case studies will spotlight USD WorkDay implementation and Honeywell. This course includes hands-on experience in a sandbox environment where students implement business processes by configuring the application.

ITL 590 | THE IT PROFESSION

Units: 3 Repeatability: No

Prerequisites: ITL 501 with a minimum grade of C- and ITL 502 with a minimum grade of C- and ITL 520 with a minimum grade of C- and ITL 525 with a minimum grade of C- and ITL 530 with a minimum grade of C- and ITL 535 with a minimum grade of C- and ITL 540 with a minimum grade of C- and ITL 545 with a minimum grade of C-

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 592 | NEW STUDENT ORIENTATION

Units: 0 Repeatability: No

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 595 | CAPSTONE

Units: 3 Repeatability: No

Prerequisites: ITL 501 with a minimum grade of C- and ITL 502 with a minimum grade of C- and ITL 520 with a minimum grade of C- and ITL 525 with a minimum grade of C- and ITL 530 with a minimum grade of C- and ITL 535 with a minimum grade of C- and ITL 540 with a minimum grade of C- and ITL 545 with a minimum grade of C-

The program capstone focuses on developing a proposal for a significant IT infrastructure initiative, e.g., implementation of a new enterprise application, or migration of a service into the cloud. Students should demonstrate the ability to analyze the proposed course of action and communicate a clear recommendation to non-technical organizational leadership. Students should also demonstrate the ability to assess options and make sound recommendations in areas in which they are not themselves technical subject matter experts. The recommendation should reflect a deep understanding of the customer organization's mission, resources, and constraints.