

IT MODERNIZATION Training Framework

Successfully delivering IT Modernization is a critical imperative for organizations in both private and public sectors.

While IT Modernization Programs require technical expertise, professional disciplines – *enterprise architecture, program management, service management and change management* – will strongly influence the likelihood of success over failure. Additionally, leadership strategies and very specialized interpersonal skills are imperative to effectively negotiate and navigate the impediments between the current state and desired future state of the enterprise. Explore our Training Framework to assess if you have the right people, with the right skills, in the right job.



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Contact Us Today

*Contact a Learning Tree Client Solutions Consultant today to discuss your unique learning needs to support a successful IT Modernization Program implementation. We can design, develop and deliver a unique **curricula path** and **learning journey** for your enterprise, a small team or for a specific job role.*



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Live Chat



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Coding & Programming



The common thread between robots, self-driving cars, games, “Apps”, websites and modern healthcare systems is a creative team of in-demand, “problem solvers” – better known as **Programmers**. Industries that are processing huge volumes of transactions – *Banking, Insurance, Healthcare, Public Sector Government Agencies, Aviation and Retail* – rely heavily on these talented software developers. As it relates to modernization, programmers play a critical function in ensuring business continuity, as they’re responsible for testing, troubleshooting and maintaining source code for the essential technologies that drive business operations.

Representative curricula for software developers:

Developing Requirements for IT Systems with Use Cases

<https://www.learningtree.com/218/>

Introduction to Java Programming Training

<https://www.learningtree.com/471/>

Java Best Practices & Design Patterns

<https://www.learningtree.com/516/>

Developing Java Web Applications

<https://www.learningtree.com/570/>

Introduction to Python Training

<https://www.learningtree.com/1905/>

Advanced Python: Best Practices & Design Patterns

<https://www.learningtree.com/1906/>

Perl 5 Programming Introduction

<https://www.learningtree.com/431/>

C# Training: Introduction to C# Programming

<https://www.learningtree.com/419/>

Programming C# Extended Features

<https://www.learningtree.com/973/>

Introduction to SQL Databases

<https://www.learningtree.com/8426/>

Writing Advanced SQL Queries

<https://www.learningtree.com/929/>

JavaScript Essentials for the Full Stack Developer Using ECMAScript

<https://www.learningtree.com/2319/>

Building Responsive Web Applications with CSS3

<https://www.learningtree.com/522/>

Introduction to Programming using .Net

<https://www.learningtree.com/502/>



Modernizing Architecture, Infrastructure & Applications



Application modernization services address the migration of legacy to new applications or platforms, including the integration of new functionality to provide the latest functions to the business. Modernization options include re-platforming, re-hosting, recoding, rearchitecting, re-engineering, interoperability, replacement and retirement, as well as changes to the application architecture.

Representative curricula for application managers and software engineers:

Developing Requirements for IT Systems with Use Cases

<https://www.learningtree.com/218/>

User Experience (UX) Design for Successful Software

<https://www.learningtree.com/1802/>

Agile Fundamentals Training

<https://www.learningtree.com/918/>

Agile Testing Strategies and Practices

<https://www.learningtree.com/1815/>

Agile Programming Professional

<https://www.learningtree.com/933/>

Software Change, Configuration and Release Management

<https://www.learningtree.com/342/>

Effective Software Testing Strategies

<https://www.learningtree.com/4876/>

Introduction to Microservices Architecture

<https://www.learningtree.com/1850/>

Fundamentals of DevOps (ICP-FDO Certification)

<https://www.learningtree.com/3641>

FAC-P/PM-IT: Architecture and Design

<https://www.learningtree.com/u211/>

Service-Oriented Architecture (SOA) Introduction

<https://www.learningtree.com/424/>

Mobile App Development Training

<https://www.learningtree.com/training-directory/mobile-app-development-training/>



Data Management & Data Optimization



Data management and data optimization in the modern world of **Digital Transformation** encompasses a variety of different techniques that facilitate and ensure data control and flow from creation to processing, utilization and retention. Data management is implemented through a cohesive infrastructure of technological resources and a governing framework that define the administrative and transformation processes used throughout the life cycle of data.

Representative curricula for data analysts and big data specialists:

Introduction to Data Science, Machine Learning & AI

<https://www.learningtree.com/1253/>

Introduction to Big Data Training

<https://www.learningtree.com/1250/>

Hadoop Programming with Java for Big Data Solutions

<https://www.learningtree.com/1251/>

Business Intelligence: Preparing for a BI Initiative

<https://www.learningtree.com/901/>

Extracting Business Value From Big Data With Pig and Hive

<https://www.learningtree.com/1254/>

Apache Spark Programming with Scala for Big Data Solutions

<https://www.learningtree.com/1262/>

Tableau: Presenting Analytic Visualizations

<https://www.learningtree.com/1256/>



Network Optimization & Cloud Computing



Network optimization looks at the individual end user, or IoT device, up to the server and the tools and connections associated with it. Network optimization must be able to boost network efficiency, while minimizing the use of additional or expensive hardware or software; most as a result of moving to the cloud. IT Modernization Programs are evolving rapidly toward the use of cloud services, including Infrastructure-as-a-Service (IaaS), Platform-as-a-Service (PaaS) and Software-as-a-Service (SaaS) as the cost in maintaining an exclusive on-premise computing solution is no longer viable.

Representative curricula for network analysts and cloud network engineers:

Introduction to Networking

<https://www.learningtree.com/450/>

Virtualization Technologies Introduction

<https://www.learningtree.com/170/>

Network Configuration and Troubleshooting

<https://www.learningtree.com/451/>

CompTIA A+ Certification Exam Prep

<https://www.learningtree.com/445/>

Deploying VMware vSphere

<https://www.learningtree.com/171/>

Introduction to Cloud Computing Training

<https://www.learningtree.com/1200/>

Managing Enterprise Networks with Prime Infrastructure (MENPI v3.0)

<https://www.learningtree.com/2846/>

AWS Training: A Comprehensive Introduction to Amazon Web Services

<https://www.learningtree.com/1205/>

Microsoft Azure Fundamentals (10979)

<https://www.learningtree.com/8409/>

Red Hat OpenStack Administration I (CL110)

<https://www.learningtree.com/1682/>



Cyber Security



Persistent business and security risks dictate organizations can no longer delay IT modernization investments. Legacy systems are consuming an increasing portion of operating expenses, decreasing the resources available to invest in critical business imperatives. Similarly, older technologies become more vulnerable as successful security exploits become more prevalent. Deploying best practices in cyber security is imperative when modernizing technology and business processes and, most importantly, when upskilling staff to support IT Modernization Programs.

Representative curricula for security architects and analysts:

Cyber Security Risk Assessment & Management

<https://www.learningtree.com/2013/>

Penetration Testing: Tools and Techniques

<https://www.learningtree.com/537/>

CISSP Training and Certification Exam Preparation

<https://www.learningtree.com/2058/>

Social Engineering Training: Deceptions and Defenses

<https://www.learningtree.com/2012/>

Disaster Recovery Planning: Ensuring Business Continuity

<https://www.learningtree.com/289/>

Digital Forensics Tools and Techniques

<https://www.learningtree.com/2055/>

System and Network Security Introduction

<https://www.learningtree.com/468/>

Securing Web Applications, Services and Servers

<https://www.learningtree.com/940/>

Endpoint Security and Network Access Control

<https://www.learningtree.com/2011/>

Identity and Access Management Training

<https://www.learningtree.com/2056/>

Strategic Leadership & Program Oversight



Organizational leadership must effectively articulate the business imperatives that underscore the principle requirements of any IT Modernization Program. To achieve this, senior leaders must deconstruct the change process into three critical steps: defining the target state for their IT architectures, deciding which elements of the IT landscape (systems, people, and processes) need to change, and determining the sequence and scope of change. Then, the organization must be able to deliver the intended performance expectations on time and on budget. Throughout this change initiative, leadership must foster a cultural change to purge legacy thinking, processes and business practices.

Representative curricula for organizational and department leaders, and Program Managers:

Business Relationship Management: Aligning IT & the Business

<https://www.learningtree.com/902/>

Strategic Thinking for Operational Management

<https://www.learningtree.com/3310/>

Agile Leadership

<https://www.learningtree.com/3401/>

Critical Thinking and Creative Problem Solving

<https://www.learningtree.com/284/>

Developing Your Leadership Voice for Presence and Impact

<https://www.learningtree.com/3405/>

21st Century Leadership: Inspiring Excellence and Engagement

<https://www.learningtree.com/3311/>

Introduction to Business Process Improvement (BPI)

<https://www.learningtree.com/3505/>

Program Management: Essential Skills for Your Program Success

<https://www.learningtree.com/3611/>

Introduction to Project Management Training

<https://www.learningtree.com/296/>

Risk Management for Projects, Programs and Operations

<https://www.learningtree.com/286/>

Building & Evolving a Project Management Office

<https://www.learningtree.com/3610/>

Enterprise Process Improvements



Enterprise Process Improvement (EPI) is a proven strategy to support the redesign of an organization's existing business operations to accomplish significant improvement in production. Effective EPI helps to generate systemic and sustainable results in operational efficiency, customer focus and technology deployment – moving an organization from Ad Hoc to Optimized.

Representative curricula for business analysts and architects:

Introduction to Business Process Improvement (BPI)

<https://www.learningtree.com/3505/>

Lean IT: Achieving Foundation Certification

<https://www.learningtree.com/3630/>

Lean Six Sigma Certification

<https://www.learningtree.com/training-directory/lean-six-sigma/>

BCS Certificate in Modelling Business Processes

<https://www.learningtree.com/3509/>

COBIT® 5 Foundation

<https://www.learningtree.com/3922/>

Maturing IT Organizations: Strategy to Operations Management

<https://www.learningtree.com/3628/>

Stakeholder Management & Customer Engagement



One of the primary objectives of any IT Modernization Program is to deliver business value and improved services to customers. Therefore, not having the right conversation with the right people – up front and throughout the program – can have a devastating effect on solution design, delivery performance, team reputation and program success. IT Modernization requires teams to employ both the science and art of influencing, while leading change through proper business analysis and diverse communication strategies.

Representative curricula for all personnel engaging and negotiating with customers:

Stakeholder Management Essentials

<https://www.learningtree.com/4975/>

Conflict Management and Resolution Essentials

<https://www.learningtree.com/4972/>

Organizational Change Management: APMG CM™ Practitioner Certification

<https://www.learningtree.com/288/>

Business Analysis Introduction: Defining Successful Projects

<https://www.learningtree.com/211/>

Assertiveness Skills: Communicating with Authority & Impact

<https://www.learningtree.com/244/>

Achieving Excellence in Customer Service

<https://www.learningtree.com/910/>

Influence Skills: Getting Results without Direct Authority

<https://www.learningtree.com/294/>