# Certified Process Design Engineer (CPDE)

**Days:** 4

**Audience:** Employees, managers, and consultants involved in designing, improving, or re-engineering processes, along with internal and external stakeholders and suppliers impacted by those processes.

**Prerequisites:** Foundation Certification in IT Service Management is recommended.

**Description:** There are many frameworks and standards that define best practices for achieving quality IT service management (ITSM) - ITIL, ISO/IEC 20000, COBIT, CMMI, DevOps, Knowledge-Centered Support, etc. While each describes processes and controls (**what to do**), none provide clear, step-by-step methods and techniques for actually designing, reengineering and improving processes (**how to do it**).

That's where CPDE comes in, bridging the gap by teaching the ***how*** and equipping professionals with practical, repeatable methods to design and improve ITSM processes.

Written in-house by the ITSM Academy content team, the Certified Process Design Engineer (CPDE)® certification course teaches how to (re)engineer and improve quality, lasting IT Service Management (ITSM) processes. This highly interactive course provides hands-on opportunities to analyze, design, measure and integrate ITSM processes. The knowledge obtained in this course *applies to every Service Management framework, standard and maturity model.*

**Course Objectives:** In this course, you will be:

- Using proven methods to design (or redesign) processes
- Using best practices to implement and improve processes
- Measuring and marketing the benefits of process improvements
- Overcoming resistance to organizational change
- Using technology to increase efficiency and effectiveness
- Utilizing available frameworks and standards
- Determining customer requirements
- Evaluating the maturity of existing processes
    - IT service management
    - Processes maturity
    - Quality management

**OUTLINE:**

## LESSON 1: THE CPDE ROLE

- Overview of the Certified Process Design Engineer role

## LESSON 2: INTRODUCTION

- What is Service Management?
- Why Processes are Important
- Value Chains, Value Streams, and Processes

## LESSON 3: THE CHANGING ROLE OF IT

## LESSON 4: THE CHANGING ROLE OF TECHNOLOGY

## LESSON 5: THE VALUE OF IT SERVICE MANAGEMENT

## LESSON 6: USING FRAMEWORKS AND STANDARDS

## LESSON 7: ITSM FRAMEWORKS AND STANDARDS

- ITIL® 4
- Control Objectives for Information and Related Technology (COBIT)

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- Knowledge-Centered Service

### LESSON 8: RELATED FRAMEWORKS

- Agile Service Management
- DevOps
- Site Reliability Engineering
- IT4IT™

### LESSON 9: ITSM STANDARD

- ISO/IEC 20000

### LESSON 10: PROCESS MATURITY FRAMEWORKS AND STANDARDS

- Capability Maturity Model Integration (CMMI)
- ISO/IEC 15504
- ITIL Process Maturity Framework (PMF)

### LESSON 11: QUALITY MANAGEMENT FRAMEWORKS AND STANDARDS

- Total Quality Management (TQM)
- Capability Maturity Model Integration (CMMI)
- Lean
- Six Sigma
- ISO 9000 and ISO 9001

### LESSON 12: CUSTOMER REQUIREMENTS AS A TRIGGER

### LESSON 13: PROCESS DESIGN CONSIDERATIONS

### LESSON 14: PROCESS DESIGN APPROACHES

- Developing processes
- Reengineering processes
- Improving processes

### LESSON 15: DEFINING AND DOCUMENTING PROCESSES

### LESSON 16: ASSESSING PROCESS MATURITY

### LESSON 17: TEN PROCESS DESIGN AND IMPROVEMENT STEPS

### LESSON 18: PROCESS DESIGN AND IMPROVEMENT TOOLS AND TECHNIQUES

- Process Maps
- Seven Basic Tools of Quality Control
- Producing a Business Case
- Calculating ROI
- Conducting a Cost Benefit Analysis
- Creating a RACI Matrix

### LESSON 19: PRODUCING MEANINGFUL METRICS

- Metric Types
- Metric Usages
- Implementing a Metrics Program
- Service Level Management and Metrics

### LESSON 20: MANAGING ORGANIZATIONAL CHANGE

### LESSON 21: ORGANIZATIONAL CHANGE MANAGEMENT (OCM)

### LESSON 22: SUCCESSFUL OCM PROGRAM COMPONENTS

- Preparation
- Motivation
- Education and Training

### LESSON 23: SUMMARY

### LESSON 24: EXAM REVIEW