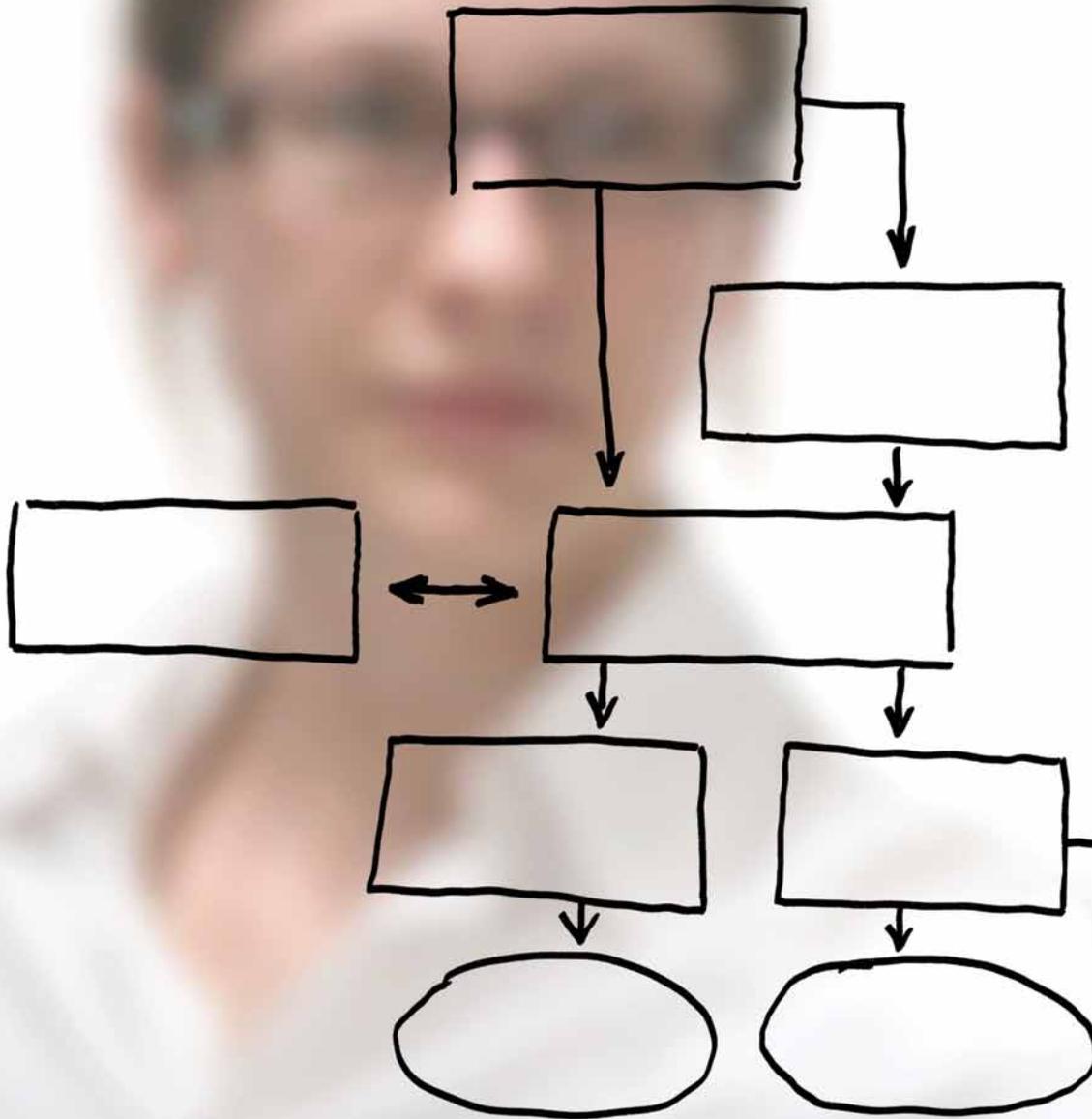


# Process Improvement Training Portfolio

Corporate and  
Continuing Education



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To stay competitive, all businesses focus on achieving increasingly better bottom-line results. That's why it's essential to develop and maintain business processes that are efficient and error-free. Central Piedmont Community College (CPCC) is committed to helping you and your organization get better results through process improvement.

This portfolio of integrated offerings is designed to help you better understand the many methods and tools we offer in process improvement – simply, our expertise in the core concepts of identification, analysis and improvement. What better way to achieve breakthrough results?

Corporate and Continuing Education will guide you in implementing process improvements and will deliver these courses at your business or at one of our six campuses on a schedule that suits you.

## Programs featured inside:

- Business Analysis
- Six Sigma
- Lean Concepts and Tools
- Process Improvement Teams
- Process Management
- Project Management
- Supply Chain Management
- Problem Solving and Innovation

# Business Analysis

## Business Analysis Plus Certificate

The Business Analysis Plus Certificate program is a comprehensive program designed for anyone who determines project needs or who needs to define, communicate, recommend and manage the scope of a business solution. The program provides extensive training on determining business requirements, project planning and control, data gathering, creating functional specifications and structured testing utilizing the IIBA™ (International Institute of Business Analysis) and BABOK® (Business Analysis Body of Knowledge). The program includes the following components:

### Determining Business Requirements

Participants learn how to create business case and business requirements documents that will identify what the project will do and what it will not do.

### Data Gathering and Requirements Elicitation

Participants will learn effective techniques for gathering information about project requirements, assumptions and constraints and communicating to project stakeholders.

### Creating Functional Specifications

Participants utilize an effective analysis method to make the transition from business requirements to functional specifications including use cases, object-oriented and structured analysis concepts to facilitate communication among project stakeholders.

### Structured Testing Techniques

Participants learn how to locate errors during the implementation, programming and testing phases of projects to ensure the system being developed meets business requirements.

Also see **Project Planning and Control** on page 5.

## Additional Topics in Business Analysis

### Applied Analytics

Participants learn Visio and advanced Excel data techniques utilized by business analysts to run break-even analysis and interactive dimensional analysis as well as utilizing lookup and database functions.

### Business Writing: Building a Requirements Package

Participants learn to write clear and concise products that will inform all stakeholders in an effective and professional manner.

### Communicate or Die: Effective Communications in Business and Projects

Participants learn the foundation for successfully navigating the project life cycle and employing specific business analysis and project management tools and techniques, such as use cases, data modeling, cross-functional process maps and more.

# Six Sigma

## Lean Six Sigma Champion Training

Lean Six Sigma Champion Training enables management professionals to learn and to better understand the value of Lean Six Sigma. Participants will get best practices and learn how to plan and sponsor continuous improvement projects using Lean Six Sigma principles. This workshop is designed to help your organization launch and implement Lean Six Sigma techniques to generate sustainable improvement faster than ever before.

### White Belt

This awareness-level course is designed for employees known as “White Belts” in Six Sigma nomenclature. It provides an awareness and general understanding of the Six Sigma methodology so participants become Six Sigma conversant.

### Green Belt Certification

This course certifies participants as Six Sigma Green Belts – individuals who work directly with cross-functional project leaders to carry out identified improvement projects. Skills learned in this course enable Green Belts to implement all of the appropriate tools of Six Sigma and to lead independent local projects when necessary. They work with these cross-functional teams to define and measure problems, analyze the root causes, implement improvements and establish control. This course blends classroom instruction with online assignments.

### Black Belt Certification

As our highest level of Six Sigma certification, participants will understand and define the quality philosophy of Six Sigma and DMAIC-L. They will also identify benefits and objectives; identify and implement the DMAIC-L process; outline the implementation process; understand the organizational value, its philosophy, goals and definition; understand key drivers, metrics and scorecards for business; use the correct formula to calculate ROI; use graphical, statistical and qualitative tools to understand customer feedback; calculate DPU, RTY and DPMO sigma levels and understand how metrics propagate upward and allocate downward; compare and contrast capability, complexity and control; manage the use of Sigma performance measures to drive enterprise decisions and much more. This course blends classroom instruction with required online assignments.

### Design of Experiments

This training engages participants in four “learn/apply” cycles using real business scenarios and problems. Participants will develop proficiencies in using Six Sigma tools and techniques to show actual savings and customer benefits through actual experiential design and project work.

### Minitab

Participants will learn how to navigate the various windows, toolbars and customization features used in Minitab to increase their efficiency in performing basic exploratory data analysis. In addition, participants will learn how to import various types of data (Excel, text, etc); export data and output between Minitab and various software packages; and how to create, manipulate and restructure data for specific tasks.

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## Lean Concepts and Tools

### Lean Fundamentals

This hands-on factory simulation engages participants and introduces them to basic concepts of lean manufacturing and the fundamental components required to implement lean manufacturing on the plant floor.

### Lean Office

This class introduces basic concepts of lean thinking and extends this thinking to the office environment. Using an office simulation and various examples, participants learn to identify waste in office activities such as long customer response times, queued work, too many hand-offs, poor communication processes, etc.

### Lean Enterprise Certification

This program focuses on the development of lean business practices in administrative and non-production functional areas. This high-impact program develops participants' skills in lean concepts, and provides tools and methods to improve operational effectiveness and efficiency.

### 5S System

The 5S System is a systematic approach using the five activities: sort, set, shine, standardize and sustain to establish an uncluttered, well-organized and understandable workplace. It promotes safety, improved workflow, better product quality and reduced inventory waste. Above all, it promotes ownership and control by users of the space. Participants will receive a basic understanding of the 5S method, including details on how to implement the five activities. The participant will learn the roles and responsibilities of a 5S implementation team, how to create a vision for the workplace and how to use a workplace scan diagnostic checklist.

### Poka-Yoke/Mistake-proofing

This is an introductory course in the Lean family of productivity tools. Mistake-proofing can provide process improvements that prevent errors and defects, thereby improving quality, reducing costs and driving higher customer service and satisfaction.

### Value Stream Mapping

Participants in this course learn the value stream mapping process, a technique to identify and eliminate waste in processes. The techniques will be applied to value streams that the participants manage. Participants will design current and future state maps then create an action plan to achieve the future state.

Improving processes and reducing defects saves money and increases customer satisfaction.

### Kaizen Training

Kaizen is a focused approach that brings critical resources together and empowers participants not only to identify root cause and determine solutions, but also to implement the change. Time and effort are spent on the shop floor or wherever the value stream problem exists.

### Lean Six Sigma for Leaders

Lean Six Sigma cultures are created and sustained through strong organizational leadership. A Lean Leader uses proven leadership strategies to accomplish goals, but his/her day-to-day activities become significantly different after implementing a Lean strategy. Understanding how and when to apply tools, such as Six Sigma, is one example. This course provides insight into the role of a Lean Leader in developing and sustaining a Lean culture.

## Process Improvement Teams

For teams to achieve their goals, members must do more than carry their own weight. They must involve, support and share information and be committed to the success of the entire team. CPCC offers a deep portfolio of training to address leadership, communication, team development for project teams and change management. Contact our Corporate Learning team for more information at 704.330.4660.

## Process Management

### Process Management Fundamentals

Participants develop a road map that will enable process owners and teams to identify, define, manage and improve their business processes. The class will address current processes, new processes and how to ensure they meet business performance objectives.

### Statistical Process Controls

Basic Statistical Process Control (SPC) provides the vital skills to keep processes in control and build a base for continuous improvement. This program is designed for quick, efficient learning of SPC basics. It covers the basic concepts and tasks of collecting data, calculating values and constructing control charts. Participants also learn how to use SPC data to uncover problems and to apply basic techniques in solving those problems.

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## Project Management

### Project Management Fundamentals

This project management course provides an introduction to the foundational skills necessary to successfully manage projects from initiation to completion.

### Project Management Simulation

Participants learn and apply project management concepts and tools in this action-packed one-day simulation. Working on cross-functional project teams, participants analyze information, make decisions and manage the project countdown to a successful conclusion.

### Project Management Plus Certificate

The Project Management Plus Certificate program is a comprehensive program designed for anyone who leads or directs projects, programs or parts of projects. It provides extensive training following the PMBOK® (Project Management Body of Knowledge) standards, specifically including project planning and control, determining business requirements and powerful hands-on management applications of Microsoft Project in real-world project scenarios. The program also prepares participants to take the PMP® and CAPM® exams (Project Management Professional and Certified Associate in Project Management designations awarded by PMI®, the Project Management Institute). This program includes the following components:

#### Project Planning and Control

Participants learn and practice the tools and techniques needed in project manager/leader roles. The course enables participants to identify and execute appropriate planning, organizing and controlling steps for projects, while ensuring quality, the first time. This program is for anyone managing a portion or entire project in an organization (hierarchy, matrix or global task force), with shared or part-time resources, all with shifting priorities.

#### Using Microsoft Project for Effective Project Management

Participants gain experience using Microsoft Project to plan, organize, track and report single and multiple projects, schedules, estimates, deadlines, costs and resources.

#### PMP/CAPM Exam Preparation

This course prepares participants to take either the PMP or CAPM Certification exam using a highly focused approach. Participants will learn what they need to know and do to pass the PMP or CAPM exam, rather than what they need to know and do to be an effective project manager.

Also see **Determining Business Requirements** on page 3.

For information on how your organization can take advantage of these process improvement and quality programs, as well as learn about customized on-site training or other training solutions, call 704.330.4660 or visit [www.cpcc.edu/cce](http://www.cpcc.edu/cce).



# Additional Topics in Project Management

## Project Leadership

The practical tools, techniques and concepts provided in this course are reinforced and practiced with real-world project situations, exercises and checklists. A major goal is to have participants be able to apply key leadership and management concepts in their projects.

## Project Risk Management

This course is designed to follow the Project Risk Management Knowledge Area of the PMBOK. It prepares participants for on-the-job use of the six steps of managing risk, while providing the benefit of following the PMI® way.

## Green Project Management

Participants will learn the project management core competencies of planning, organizing and controlling their projects, while exploring options for producing sustainable, renewable and environmentally viable products and services.

## Project Communication Management

This course is designed to follow the Communications Management Knowledge Area of the PMBOK. It prepares participants for on-the-job communication skills, while providing the added benefit of following the PMI way.

## Managing Agile Projects

Agile projects cope with a business environment filled with constant change through enhanced communication, close collaboration between project stakeholders, iterative development, adaptive planning and teams that are largely self-organizing. This class enables participants to learn and practice agile project management methods and to adapt them to individual business environments.

## Project Procurement Management

Participants learn basic and advanced negotiating strategies and tactics, which can be used to ensure satisfactory agreements without compromising project success.

## Project Human Resources Management

Participants learn strategies and tactics they need to ensure successful teamwork. The effective manager will be able to provide active, ongoing leadership, set well defined goals and objectives and provide access to information and resources. The course is designed to follow the Human Resource Management Knowledge Area of the PMBOK.

## Project Facilitation Workshop

In the world of projects, it's said that, "The Project Manager has all the responsibility for a project's success, but not the authority to make it happen!" In today's cross-functional, high speed, multi-location and high-demand project environments, being successful has never been more difficult (and failure more public). Project Facilitation Workshop is designed to help both full-time project managers, team leaders and PMO members help project teams achieve success.

## Project Cost Management

Now more than ever, organizations are watching every dollar, euro and yen. Project managers are asked to do more, with better quality, for less money. How well project teams estimate the costs of their projects can be the difference between success and failure. This course is designed to follow the Cost Management Knowledge Area of the PMBOK. It prepares participants for on-the-job cost estimating, budgeting and controlling.

## Project Schedule Management

We've all heard it before, "Time is money!" A successful project often means producing quality deliverables within budgetary constraints, and delivered on time. Project managers have limited authority with ultimate responsibility. Project teams need a systematic approach for estimating, building and implementing the project schedule. The course is designed to follow the Time Management Knowledge Area of the PMBOK and helps prepare participants for developing realistic project schedules.

## Advanced Topics in Project Management

Whether managing one or many projects, our goal is to reach successful completion, frequently while still performing daily responsibilities. This workshop is for anyone who has completed Project Planning and Control and seeks a more detailed and systematic approach to the advanced techniques of project negotiations, project risk management, procuring products and services and possibly managing vendors in single and multiple project environments.

## Project Team Dynamics

This class teaches participants strategies and tactics needed to ensure successful communications and teamwork (even when the team is virtual). The effective manager will ensure timely and appropriate generation, collection, distribution, storage, retrieval and ultimate disposition of project information. The effective manager will also be able to provide active, ongoing leadership, set well defined goals and objectives, and provide access to information and resources. The course is designed to follow both the Communications and Human Resource Knowledge Areas of the PMBOK.

## Executive Project Management

Project management carries complex concerns, not always found in traditional process management. This program is for non-technical executives and managers who do not necessarily run projects themselves, but manage and interact with those who do. This class introduces the tools and techniques being taught to project managers and team members. The overall goals of the session are to introduce the key areas of project management and to inform management of its role in making projects successful.

## Project Management for Project Team Members

This one-day class introduces the project team members to project management and its structure. The overall objectives of this team member class are to inform participants of their roles in projects; and to enable negotiation, communication and coordination between project managers and members of the project team. This program is for people who do not manage projects and sub-projects themselves, but are critical members of project teams.

## Project Management Foundations

This one-day module introduces team members to project management and its structure. The structured model of planning, organizing, scheduling, controlling and managing change with specific tools and techniques is presented.

## Supply Chain Management

### Supply Chain Management Fundamentals

This course introduces advanced topics in logistics and supply chain analysis – topics validated by industry advisors as key to a solid foundation in developing lean supply chains. It will focus on various activities within the supply chain and offer thoughts and concepts to explore toward improving the supply chain of an organization. This course was designed for individuals who are looking to progress and develop a better understanding of the critical role they have in the supply chain and in a company's logistics performance.

### APICS Certification Preparation

This series of courses is specifically designed to prepare the participant for certification in production and inventory management. APICS training consists of five separate modules that together comprise a field of study that focuses on the effective planning, scheduling, use and control of a manufacturing or service organization through the study of concepts from design engineering, industrial engineering, management information systems, quality management, production management, inventory management, accounting and other functions as they affect the organization. Actual testing for the APICS credential is optional and separate from this class.

Additionally, the Certified Supply Chain Professional exam prep class prepares participants for the corresponding APICS CSCP exam designed for supply chain leaders who develop and execute well-run supply chain strategies.

## Problem Solving

### Problem Solving and Decision Making

Participants learn to efficiently organize and analyze vast amounts of information and take appropriate action using methods developed by Kepner and Fourie. This class helps teams tap into the know-how of individuals, develop consensus, gain commitment and resolve conflicts.

### Innovation

This two-day workshop gives participants the opportunity to sharpen their skills through various hands-on innovation techniques and exercises. Participants will also practice the FreeZone, repeatable, innovation model developed by Kepner and Fourie, applying it to their own job-related situations. This model is flexible enough to be applied to any product, service or process.



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**system-level improvements**  
**new levels** of efficiency  
**improved** materials **flow**  
increased **productivity**  
**reduced** waste, cost and errors  
**improved** service levels

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