

# Graduate Certificate in Health Care Operational Excellence

Managing health care systems today is more than process efficiencies and quality assessment. At every level and dimension, it takes an interdisciplinary approach to get it right. The Graduate Certificate in Health Care Operational Excellence (HCOE) can help you advance with the knowledge, leadership and skills needed to establish, implement and oversee important process analysis and continuous improvement initiatives in the growing field of health care.

Designed with input from employers, thought leaders, and practitioners, the HCOE program is taught by leading health care professionals, experts and executives. This program provides a solid foundation in the areas of project management fundamentals, navigating organizational change, process improvement, human-centered design, operations and finance, and emerging issues in health care and related service organizations. The program also addresses the more nuanced human factors and topics of personal leadership and resilience.

Graduate Certificate: 15 units, 10-15 months to complete

Email: [sever@wustl.edu](mailto:sever@wustl.edu)  
Website: <https://sever.wustl.edu/degree-programs/healthcare/index.html>

## Faculty

### Program Director

**Leroy Love** (<https://sever.wustl.edu/faculty/Pages/Leroy-Love.aspx>)

Director of Graduate Studies in Health Care Operational Excellence  
MS, Missouri University of Science & Technology  
BS, University of Missouri-Columbia

For a list of our program faculty ([https://sever.wustl.edu/faculty/#health\\_care\\_operational\\_excellence](https://sever.wustl.edu/faculty/#health_care_operational_excellence)), please visit our website.

## Requirements

### Graduate Certificate in Health Care Operational Excellence

**Total units required: 15**

In order to earn the certificate, all courses must be passed with a C- or higher. In addition, a student must have a cumulative grade-point average of at least 2.70 over all courses applied toward the certificate.

Code	Title	Units
<b>Required: 15 units</b>		
HLTHCARE 501	Introductory Overview of Operational Excellence in Health Care	3
HLTHCARE 502	Facilitation Skills/Change Management	3
HLTHCARE 503	Lean Healthcare Concepts, Tools and Lean Management Systems	3
HLTHCARE 504	Six Sigma Concepts and Tools	3
HLTHCARE 507	Project Management in Healthcare	3

## Courses

Visit online course listings to view semester offerings for T71 HLTHCARE (<https://courses.wustl.edu/CourseInfo.aspx?sch=T&dept=T71&crslvl=5:8>).

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### T71 HLTHCARE 501 Introductory Overview of Operational Excellence in Health Care

This introductory course is designed to prepare students for the Master's of Healthcare Operational Excellence program. Students will learn the fundamentals of operational excellence principles and how the organizational complexities, regulatory and economic framework, and nuances of healthcare impact the ability to apply them. Students will research and explore both healthcare and non-healthcare examples of performance improvement and operational excellence efforts within different organizations and from different stakeholder perspectives. Throughout the course, students will gain an understanding of how the various methods, both social and technical, can play an integral role in achieving operational excellence, and how to identify and mitigate challenges and barriers. Specific methods will include facilitating teams, change management, lean, six sigma, project management and the importance of principle-based deployments rooted in changing behaviors and transforming culture. By completing this introductory overview course, students will understand the level of personal transformation in mindset and skills that will be necessary in order to successfully impact the changes needed for health care operational excellence.

Credit 3 units.

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### T71 HLTHCARE 502 Facilitation Skills/Change Management

This course integrates strategy and organizational due diligence with facilitation and change management strategies. By examining the relationship between employees, teams, and organizations, students will explore each level and practice assessing and facilitating team processes to maximize productivity and results for members and stakeholders. The course addresses how to get things done when teams lack leadership or authority. Supporting topics include how to build teams, how to manage meetings, how to build relationships beyond the team, and how to keep teams effective over their life span. Students will learn processes of change and the techniques of change to apply to various types of organizations while using useful design frameworks for facilitation.

Credit 3 units.

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### T71 HLTHCARE 503 Lean Healthcare Concepts, Tools and Lean Management Systems

Students will learn and apply core Lean tools including Value Stream Mapping, 5S, Visual Management, Standard Work, JIT, Push/Pull, Error Proofing, and Daily Management. Critical to applying Lean effectively, participants will also learn how to plan and lead Rapid Improvement



Events and other group activities and tactics. This program has been adopted by BJC executive leadership and is identified as a core competency for transformational efforts. Students will also learn the essential elements of a Lean Management System and how to accomplish sustainable results and the development of a continuous improvement culture.

Credit 3 units.

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**T71 HLHCARE 504 Six Sigma Concepts and Tools**

This course is designed to teach the tools associated with the five DMAIC phases: Define, Measure, Analyze, Improve and Control. Some of the tools considered for inclusion are Critical to Quality Matrix (CTQ), Failure Modes Effectiveness Analysis (FMEA), Statistical Analysis, Contingency Tables, Hypothesis Testing, Confidence Intervals, Correlation & Regression, Analysis of Variation (ANOVA), Pareto Analysis, Statistical Process Control (SPC), Measurement Systems Analysis (MSA), Data Collection, Time Studies, Root Cause Analysis (RCA), Fishbone Diagramming, Cost of Poor Quality (COPO), SIPOC, Detailed Process Mapping, Cause and Effect tools, and Design of Experiment (DOE).  
Credit 3 units.

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**T71 HLHCARE 507 Project Management in Healthcare**

This course is a practical experiential orientation to project management processes, including relevance and application. Students will be exposed to the art of project leader competencies and emotional intelligence in addition to the science of traditional project management methodologies in a healthcare setting. Participants will engage in project initiation, including strategic organizational alignment, concept of why, and charter development. Project planning will include scoping, elicitation of stakeholder requirements, work breakdown structure, scheduling, cost, quality, resources, communications and risk management. Healthcare-related project management and execution will be the focus of practical application, along with other relevant examples from outside of the healthcare industry. Learners will apply the management of triple constraint (time, cost, schedule) as well as skills to align executive sponsor(s) and key stakeholders. Exposure will include disciplines of execution, monitoring, and controlling and closing processes. The course will integrate core concepts of initiating change, portfolio and program management, business analysis, performance improvement, and effective facilitation in a healthcare setting.  
Credit 3 units.

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