Washington University in St. Louis

Health Care Operational Excellence

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Website: https://sever.wustl.edu/degree-programs/healthcare/index.html

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).

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.

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.

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.

T71 HLTHCARE 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 (COPQ), SIPOC, Detailed Process Mapping, Cause and Effect tools, and Design of Experiment (DOE).
Credit 3 units.

T71 HLTHCARE 505 Healthcare Financial Models

This course provides an overview of how healthcare financing and reimbursement systems work in the United States. The course focuses on the evolution of insurance, HMOs, and managed care. Students learn how hospitals, outpatient centers, clinicians, and other providers are reimbursed for the services. Private and public reimbursement; state rate setting; risk management; new models of reimbursement; the role of billing, coding, and accounts receivable; and managed competition are explained.
Credit 3 units.

T71 HLTHCARE 506 Innovation Science and Human-Centered Design/Human Factors

This course is intended to introduce the student to the concept of "design thinking" as well as the process for innovating. It is dependent on an individual's ability to observe what people are actually doing and how they are doing it. It also requires an iterative process for understanding, synthesizing, ideating, prototyping, testing, and implementing. Emphasis will be placed on how to build stakeholder/user personas and requirements as well as how to map their emotional experience with a process to gain more insights than a quantitative analysis alone would provide. Healthcare needs a "human-centered" design approach to navigate the blurring of lines between product and service, provider and patient. Designers of processes, methods, and systems now must take the needs of the entire world -- including the environment -- into account. Human factors will need to be applied during the iterative process to account for human factors and the parameters of users and uses.
Credit 3 units.

T71 HLTHCARE 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.

T71 HLTHCARE 508 Capstone Seminar
This course integrates the learning from all disciplines and subject matter presented in the Master's in Healthcare Operational Excellence program to complete a comprehensive, practical project in a healthcare-related organization. It will include a summary of the key topics covered within the program and how these apply to student's projects. The course will also focus on leading organizational change and fostering a culture of continuous improvement in healthcare and related service organizations into the future.
Credit 3 units.

T71 HLTHCARE 509 Capstone Project
The capstone project incorporates operational excellence principles, the lean management system, rapid cycle improvement methods, data analysis, change management, facilitation, project management and healthcare cultural issues, thereby integrating the lessons learned through the course work to demonstrate students' mastery of operational excellence in healthcare. Students will work in multidisciplinary teams, delivering a final project that applies their cumulative course work within a context of real industry work.
Credit 3 units.

T71 HLTHCARE 510 Special Topics in Healthcare Leadership
This special topics course will explore emerging best practices in healthcare leadership.
Credit 3 units.

T71 HLTHCARE 599 Applied Research Study
Applied Research Study (ARS) is an advanced, project-based course designed to allow students to develop in-depth knowledge and further their education building on the education offered in the Programs. Applied research is a type of examination looking to find practical solutions for existing problems. These can include challenges in the workplace, education, and society. Students collaborate with an adjunct faculty advisor to collect data. Findings are applicable and may be implemented upon completion of a study. Applied research focuses on answering one specific applied research question for a client or sponsor. Applied Research Study must have prior approval of a faculty sponsor and the Program Director.
Credit 3 units.