The IACET-accredited way to build your knowledge and reinforce your foundation with key topics in the industrial and systems engineering field.
INTRODUCTION

The IISE Training Center has trained thousands of professionals working in positions and businesses focused on productivity, quality and efficiency. These continuing education participants represent industrial engineering, ergonomics, healthcare, logistics and distribution, government, military, manufacturing and many other professions.

Our instructors possess significant hands-on experience applying and teaching the industrial and systems engineering methods in their respective areas of expertise.

We have an extensive and strategic selection of topics, featuring Lean and Six Sigma, as well as industrial engineering and leadership skills. IISE provides training in multiple formats to accommodate your schedule and needs.

The IISE Training Center is well-equipped with all the resources you need to advance your learning objectives. Whether you are looking for classroom or online courses, or a fully customized experience based on your organization’s needs, we are here with the targeted educational training tools that will work for you.

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IISE Course Catalog Spring 2019

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What’s New?
Stay on Top of the Latest Courses
For upcoming courses and information:
www.iise.org/TrainingCenter
For UL PureSafety Training: bit.ly/ULtraining
For decades, the IISE Training Center has turned out Lean Six Sigma Yellow, Green and Black Belts – change masters that have gone on to save their companies 10s of millions of dollars.

Now, our newest offering – Lean Scrum – combines the waste-slashing methodology of Lean with the agility of Scrum, an approach born out of software development’s need to adapt to rapidly changing customer requirements.

Scrum’s iterative and incremental approach has been adapted with great success by product development teams. In an unpredictable world where customers change their minds often, pairing Scrum with Lean could be the magic that jump-starts your continuous process improvement program.

The next Lean Scrum opportunity is Nov. 19-20 at the IISE Training Center in Metro Atlanta (Norcross, Georgia), home to the Georgia Aquarium, Atlanta Botanical Gardens, Fox Theatre, Shakespeare Tavern and an unparalleled international restaurant scene.

The next Lean Scrum opportunity is Nov. 19-20 at the IISE Training Center in Metro Atlanta (Norcross, Georgia), home to the Georgia Aquarium, Atlanta Botanical Gardens, Fox Theatre, Shakespeare Tavern and an unparalleled international restaurant scene.

Read the course description on Page 16.

OTHER UPCOMING COURSES INCLUDE:

… in Los Angeles

Six Sigma Black Belt: June 4-7, July 15-19 and Aug. 5-9

… in Metro Atlanta (Norcross, Georgia)

Lean Black Belt: April 29-May 2 and June 3-6, 2019

Lean Black Belt for Healthcare: April 29-May 2 and June 3-6, 2019

Lean Six Sigma Black Belt: July 8-12, Aug. 5-9, Sept. 9-13 and Oct. 14 - 18, 2019

Lean Six Sigma Black Belt for Healthcare: July 8-12, Aug. 5-9, Sept. 9-13 and Oct. 14 - 18, 2019

Six Sigma Black Belt: Sept. 30-Oct. 4, Oct. 28-Nov. 1, Dec. 2-6, 2019

Six Sigma Black Belt for Healthcare: Sept. 30-Oct. 4, Oct. 28-Nov. 1, Dec. 2-6, 2019

Learn more and register today! www.iise.org/TrainingCenter
GENERAL INFORMATION

How to Register
Please register for ISE training courses using one of these convenient options:

• Register online at www.iise.org/TrainingCenter by following the registration link for a specific course.
• Register by fax or email by sending a completed registration form (bit.ly/2JV9bxd) to:
  – Fax: 770-441-3295
  – Email: cs@iise.org
  – Mail: ISE Training Center, 3577 Parkway Lane, Suite 200, Norcross, GA 30092
• Register by phone with ISE Member and Customer Support at 770-449-0460.

Lean and Six Sigma Certification
Individuals who complete all of the course requirements will receive the Lean, Six Sigma or Lean Six Sigma Green or Black Belts. In addition to these, a master black belt certification is also available in all areas. These certifications are valid for three years and must be renewed by emailing cs@iise.org. There will be a $15 fee to cover administrative costs associated with the renewal. Lost certificates and recertification can be managed at https://www.iise.org/Recertify.aspx.

CEUs
ISE is accredited by the International Association for Continuing Education and Training and is authorized to issue the IACET CEU. One CEU is earned for every 10 hours of classroom instruction. One CEU is equivalent to 10 professional development hours (PDH). Most states recognize these for meeting professional registration continuing education requirements.

All Six Sigma classes are compliant with ISO 13053.

Instructors
ISE Training Center courses are taught by renowned experts from both academia and industry. To learn more about the instructors for each course, visit www.iise.org/TrainingCenter.

Locations

CLASSROOM TRAINING

The majority of ISE classroom training is held at ISE headquarters in the Atlanta metro area in Norcross, Georgia. Some ISE courses are available in other locations. The site for each course is listed on the schedule page for the course. Classes are held from 8:30 a.m. to 4:30 p.m. Please plan to arrive at least 10 minutes early to sign in on the first day.

ISE can also take our training on the road and come to you. Contact Director of Training Larry Aft at laft@iise.org.

IIESE Training Center
Institute of Industrial and Systems Engineers
3577 Parkway Lane, Suite 200
Norcross, GA 30092

(Metro Atlanta):

HOTEL AND TRAVEL INFORMATION

For hotel and travel information, visit www.iise.org/TrainingCenter/HotelandTravel.

$81.1 million
The amount companies taking ISE’s Lean and Six Sigma courses have saved.

An average savings is $749,000 per project.
ONLINE COURSES

IISE offers a wide variety of online, on-demand course options in lean, Six Sigma, healthcare process improvement, traditional ISE skills, early-career advancement and more. All of IISE’s online courses are self-paced and are taught by award-winning instructors, and some courses are offered through leading third-party training organizations.

LEADERSHIP & MANAGEMENT

Introduction to Project Management
0.7 CEUs

Overview:
Industrial and systems engineers and others associated with productivity improvement in service or manufacturing organizations often must become project leaders. This seminar focuses on the skills needed to lead and manage projects successfully in those settings. The seminar presentation will use the definitions and language of ANSI/PMI 99-001-2000, the project management body of knowledge standard.

Registration Fees:
Member: $265
Non-Member: $365

LEAN

Lean Yellow Belt**
0.7 CEUs

Overview:
A lean enterprise views itself as part of an extended value chain, focusing on the elimination of waste between you and your suppliers and you and your customers. This seminar is the first step in learning the principles of lean. The instructor for this course has extensive experience implementing lean principles worldwide. This seminar will teach you the history and basics of lean and demonstrate why these practices have such a significant impact on operations. The exam is included as part of the course fee. Participants who pass the exam will receive the IISE Lean Yellow Belt Certificate.

Registration Fee:
Member: $265
Non-Member: $365

Lean Green Belt
2.1 CEUs

Overview:
This three-day equivalent course provides an in-depth understanding of lean enterprise principles and how to apply them within your organization. Your lean journey begins with a series of interactive simulations that demonstrate how each lean concept is applied and its impact on the process. Mapping the process flow and identifying the activities that add value from the customer’s perspective is the cornerstone of this class. The class is then given a scenario and the students simulate the conversion from traditional to lean in a practical hands-on environment. The course also provides a structure for how to manage a lean process for continuous improvement. Participants will learn how to structure their organizations to support and continuously improve a lean process. Participants will also fully understand how to implement 5S within their plants and how to begin reducing setup time using the SMED process. The exam is included as part of the course fee. Participants who pass the exam will receive the IISE Lean Green Belt Certificate.

Registration Fee:
Member: $799
Non-Member: $1,095

Lean Black Belt
5.6 CEUs

Overview:
This course is designed to prepare the black belt or “master practitioner” for implementing lean across the enterprise. It will lay the groundwork for building a lean enterprise transformation by portraying the entire spectrum of a lean transformation from traditional processes to a lean product delivery system. By the end of this course, participants will be able to answer these questions:

1. How do the steps of the lean enterprise fit together?
2. How does a lean “black belt” provide direction and vision toward a corporate lean effort?
3. How does a lean “black belt” apply the principles of lean across the enterprise?

Note that your project is due no later than one year after the exam has been successfully completed. The exam is included as part of the course fee. Participants who successfully complete a project and pass the black belt examination will receive the IISE Lean Black Belt Certificate.

Registration Fees:
Member: $1,595
Non-Member: $2,395
**SIX SIGMA**

**Six Sigma Yellow Belt**  
0.7 CEUs

**Overview:**  
Demystify this topic with this seminar that includes a discussion of the Define-Measure-Analyze-Improve-Implement-Control (DMAIIC) methodology. This seminar will provide you with an overview of the basic philosophy, organization and methodology for Six Sigma quality and introduce you to the Six Sigma topics of variation, process capability and root cause analysis. The exam is included as part of the course fee. Participants who pass the exam will receive the IISE Six Sigma Yellow Belt Certificate. Note: Individuals planning to take Six Sigma Green Belt should not take this course.

**Registration Fees:**  
Member: $265  
Non-Member: $365

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**Six Sigma Green Belt**  
2.1 CEUs

**Overview:**  
Learn how to integrate principles of business, statistics and engineering to achieve tangible results. Master the use of Six Sigma to quantify the critical quality issues in your company. Once the issues have been quantified, statistics can be applied to provide probabilities of success and failure. Six Sigma methods increase productivity and enhance quality. As a Six Sigma Green Belt, you will be equipped to support and champion Six Sigma implementation in your organization. After completing the course materials, you will have the option to take IISE’s Green Belt exam online. The exam is included as part of the course fee. Participants who pass the exam receive the IISE Six Sigma Green Belt Certificate.

**Registration Fees:**  
Member: $799  
Non-Member: $1,095

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**Six Sigma Black Belt**  
10.5 CEUs

**Overview:**  
Learn the advanced problem-solving skills you need to implement the principles, practices and techniques of Six Sigma to maximize performance and cost reductions in your organization. During this three-week equivalent practitioner course, you will learn how to measure a process, analyze the results, develop process improvements and quantify the resulting savings. You will be required to complete a project demonstrating mastery of appropriate analytical methods and pass an examination to earn IISE’s Six Sigma Black Belt Certificate. This practitioner course for Six Sigma implementation provides extensive coverage of the Six Sigma process as well as intensive exposure to the key analytical tools associated with Six Sigma. These include project management, team skills, cost analysis, FMEA, basic statistics, inferential statistics, sampling, goodness of fit testing, regression and correlation analysis, reliability, design of experiments, statistical process control, measurement systems analysis and simulation. Computer applications are emphasized. The exam is included as part of the course fee. Participants who pass the exam will receive the IISE Six Sigma Black Belt Certificate. Note that your project is due no later than one year after the exam has been successfully completed.

**Registration Fees:**  
Member: $2,995  
Non-member: $4,475

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**LEAN SIX SIGMA**

**Lean Six Sigma Green Belt**  
3.5 CEUs

**Overview:**  
Learn how to integrate principles of business, statistics, waste reduction and engineering to achieve tangible results. Master the use of Lean Six Sigma to quantify the critical quality issues in your company. Once the issues have been quantified, Lean and Six Sigma analysis, including statistics, can be applied to provide probabilities of success and failure. Lean and Six Sigma methods increase productivity and enhance quality.
As a Lean Six Sigma Green Belt, you will be equipped to support and champion Lean Six Sigma implementation in your organization. To earn the Lean Six Sigma Green Belt Certificate, you will be required to pass IISE’s Online Lean Six Sigma Green Belt exam. **The exam is included in the course fee.** Participants who pass the exam will receive the IISE Lean Six Sigma Green Belt Certificate.

**Registration Fees:**
- Member: $1,299
- Non-Member: $1,695

**Lean Six Sigma Green Belt for Healthcare**
3.5 CEUs

**Overview:**
Learn how to integrate principles of business, statistics, waste reduction and engineering to achieve tangible results in the healthcare arena. Master the use of Lean Six Sigma to quantify the critical quality issues in your company. Once the issues have been quantified, Lean and Six Sigma analysis, including statistics, can be applied to provide probabilities of success and failure. Lean and Six Sigma methods increase productivity and enhance quality. As a Lean Six Sigma Green Belt, you will be equipped to support and champion Lean Six Sigma implementation in your organization. To earn the Lean Six Sigma Green Belt Certificate, you will be required to pass IISE’s Online Lean Six Sigma Green Belt exam. **The exam is included in the course fee.** Participants who pass the course will receive the IISE Lean Six Sigma Green Belt Certificate.

**Registration Fees:**
- Member: $1,299
- Non-Member: $1,695

**Lean Six Sigma Black Belt**
14.0 CEUs

**Overview:**
Lean techniques eliminate wasteful activities, while Six Sigma is a disciplined method for meeting customers’ expectations and eliminating defects in any process. IISE’s Lean Six Sigma Training offers the unique approach of weaving both lean and Six Sigma methodologies into a seamless certificate program that can help you achieve substantial improvements in your organization. By completing this course of study, you will gain a solid general knowledge of the theory, composition and implementation of a Lean Six Sigma initiative. You will also become proficient in all of the analytical tools necessary to define, measure, analyze, improve, implement and control improvement projects. **The exam is included as part of the course fee.** Participants who pass the exam will receive the IISE Lean Six Sigma Green Belt Certificate. *Note that the project is due no later than one year after the exam has been successfully completed.*

**Registration Fees:**
- Member: $4,195
- Non-Member: $5,995

**HEALTHCARE PROCESS IMPROVEMENT**

**Healthcare Labor Management**
1.4 CEUs

**Overview:**
In today’s healthcare environment, labor expense is typically 50 percent of a healthcare system’s annual budget. With software and support available in the industry today, an effective labor management program is within reach of all hospitals and health systems, regardless of their facility size or internal technical expertise. This course will provide an understanding and overview of critical aspects of designing and executing a comprehensive labor management program.

**Registration Fees:**
- SHS Member*: $395
- Member: $445
- Non-Member: $640

*Society for Health Systems (SHS) – For details, visit [www.iise.org/SHS](http://www.iise.org/SHS)

**Introduction to IE in Healthcare**
1.4 CEUs

**Overview:**
Increasing requirements for cost control and operational efficiencies, decreasing reimbursements and the emergence of large healthcare systems are key factors in the healthcare industry’s growing need for improving performance. This course will address the differences between traditional industry and healthcare from an industrial engineering perspective and equip you with the information and tools you need to be successful as an ISE in healthcare.

**Registration Fees:**
- SHS Member*: $395
- Member: $445
- Non-Member: $640

*Society for Health Systems (SHS) – For details, visit [www.iise.org/SHS](http://www.iise.org/SHS)

**Six Sigma Green Belt for Healthcare**
See pg. 6
Principles in Patient Flow & Throughput
1.4 CEUs

Overview:
This course presents common patient flow challenges and explores the system dynamics affecting patient throughput across the entire enterprise. We will cover industrial engineering concepts and tools you can use to develop metrics and conduct PI projects to evaluate and improve your institution’s patient flow throughout the entire patient encounter.

Registration Fees:
SHS Member*: $395
Member: $445
Non-Member: $640

*Society for Health Systems (SHS) – For details, visit www.iise.org/SHS

SHS “No-Wait ED” Series:
This Is How We Do It
2.1 CEUs

Overview:
Six compelling courses focused on emergency healthcare through key areas, including engineering, throughput dynamics, flow models, lean principles, rapid evaluation units, data analytics and project management. This course will provide practical tools and training to decrease patient wait time.

Registration Fees:
Member: $299
Non-Member: $349

TECHNICAL SKILLS

Fundamentals of Industrial Engineering
2.1 CEUs

Overview:
Plan to enjoy this seminar that enables you to create process improvement and performance enhancement for your company. Learn how to streamline organizations, facilities, plans, tools, processes, methods and work environments for optimal effectiveness. Discover the responsibilities and practices of an industrial engineer and develop the talents necessary to strengthen overall performance. Whether you work in manufacturing, service or government, this course shows you how to use industrial engineering techniques as competitive tools to improve your organization.

Registration Fees:
Member: $799
Non-Member: $1,095

PE Exam Review for Industrial Engineers
2.8 CEUs

Overview:
Improve your odds of passing the most important test of your career with this popular review course. Licensure for professional engineers opens the door to a world of opportunity and career development, but first you must pass two exams: The Fundamentals of Engineering exam and the PE exam. The course instructors will cover all major elements of the PE exam, refreshing your knowledge of IE topics, terminology and formulas; working through practice problems; and identifying areas you need to focus on during your current industrial and systems engineering exam prep. The course reviews the key concepts from the industrial engineering body of knowledge as well as presenting sample exam questions. Since the exam changes from year to year there is no guarantee that all possible example questions will be covered. This course includes an online version of the “Sample P.E. Exam in Industrial Engineering Third Edition” by W. J. Kennedy, Ph.D., P.E. Individuals preparing for the exam may wish to purchase the “Review for the PE Exam.” Participants in the review course will receive a specially developed set of review notes available only to registrants for the class.

Registration Fees:
Member: $1,595
Non-Member: $1,945

WORK MEASUREMENT & DESIGN

Basic Modapts Practitioner Certification Training
2.1 CEUs

Overview:
Learn how to use the fastest-growing and easiest-to-use work measurement system to achieve tangible business results using reliable data. By the end of this course, you can expect to:

• Be fluent in the language and use of the MODAPTS work measurement system
• Apply MODAPTS methods for setting work standards
• Analyze and improve existing work methods utilizing MODAPTS
• Improve the ergonomics and productivity of work tasks
• Apply knowledge gained through this course in order to test to become a Certified MODAPTS practitioner by the International MODAPTS Association, (IMA).

After completing the course materials, you will have the option to take IMA’s Basic MODAPTS Practitioner Certification exam online. The exam is included as part of
the course fee. Participants who pass the exam receive the IMA’s Certificate.

Registration Fees:
Member: $799
Non-Member: $1,095

Principles of Occupational Ergonomics
2.1 CEUs

Overview:
This workshop introduces you to basic ergonomics principles and addresses topics such as: musculoskeletal disorders (MSDs) and other ergonomics-related problems, identifying and prioritizing ergonomic stressors, determining root causes, analysis techniques, developing appropriate control measures and design criteria. This workshop prepares you to conduct both industrial and office assessments for the control of ergonomic stressors that could potentially lead to the development of work-related musculoskeletal disorders. The course mixes lecture and “hands-on” laboratory sessions to allow you to apply techniques that will facilitate feasible, effective and justifiable solutions. This course is offered in conjunction with the Ergonomics Center of North Carolina.

Registration Fees:
AES Member*: $449
IISE Member: $499
Non-Member: $599
*Applied Ergonomics Society (AES) – For details, visit www.iise.org/AES

Work Measurement
1.4 CEUs

Overview:
With the advent of new technologies, some companies have moved away from using work standards — and performance has suffered. Work measurement is no longer just a time study. For next generation companies, work measurement has become a knowledge-centered activity providing complete knowledge of the human-process interface. Return to the roots of managing business processes. Learn the importance of using work standards and discover why they are key elements of the management information system necessary for process improvements and lean manufacturing.

Registration Fees:
Member: $535
Non-Member: $730

Healthcare Labor Management
See pg. 7

EXPANDED OFFERINGS: IISE COURSES OFFERED IN PARTNERSHIP WITH THIRD-PARTY ORGANIZATIONS

IIE offers many project management courses in partnership with the leading PMP certification bodies. Visit www.iise.org/TrainingCenter/PMP for the list of available PMP courses and their fees.

Project Management Online for PMP Certification
3.5 CEUs

Overview:
The project management program builds successful project managers at all levels of the organization. The courses in this series are designed specifically for industrial engineers looking to prepare and take the PMP® exam or brush up on project management concepts found in PMBOK® Knowledge.

Registration Fees:
For pricing information, please visit www.iise.org/TrainingCenter/PMP.

Project Management Team Leadership
1.8 CEUs

Overview:
The vast majority of project work in today’s organizations is done in a team setting. Project management team leaders must be effective at identifying and resolving team problems in order for the project to succeed. This course discusses the roles and responsibilities of the project management team leader, in particular their responsibility with regard to project stakeholders. You will learn how project management team leaders can build a positive team environment through effective communication, team building activities and reflective listening. The course also covers problem solving within the team.

Registration Fees:
Member: $395
Non-Member: $395
CLASSROOM TRAINING

Our Classes are Designed With You in Mind…

IISE offers a curated selection of classroom training proven to succeed in meeting your professional development goals. IISE training is an investment in yourself and your company, and we have a track record in achieving substantial and measurable results. We excel at advancing your skill set and techniques in ways that enrich and advance your career. Likewise, our corporate on-site training classes have resulted in significant performance advancements, with companies taking IISE’s Lean and Six Sigma courses realizing as much as $5 million in savings.

Our Instructors are ISE and Continuous Improvement Experts…

Our instructors are experts in industrial engineering concepts and the application of key tools including lean, Six Sigma and analytics. They have repeatedly demonstrated their talent in both teaching effective implementation of these concepts through engaging and interactive classroom formats and applying them in business operations.

It’s all Customizable…

In addition to our breadth of current classes, all of our classroom courses are available as fully tailored Corporate Training to deliver exactly what you need at your location.

View classroom training dates at www.iise.org/TrainingCenter.

ANALYTICS

Introduction to Engineering Analytics

2 Days | 1.4 CEUs

Overview:
This course offers the latest on Big Data and data visualization. Engineers, managers and anyone who wants to understand how Big Data will impact their operations will be introduced to the fundamentals of engineering analytics, that is, the process of leveraging data into actionable insights. These strategies will be applicable to a wide range of applications including customer segmentation for better resource utilization, improved performance tracking for diagnosis and maintenance, classification strategies for improved inventory management, better use of sales data for increased revenues and customer satisfaction, and better forecasts. Basic methods will be introduced in the areas of descriptive and predictive analytics and Big Data. Participants will gain hands-on experience through the use of case studies and example problem demonstrations. Microsoft-based tools such as Excel will be used when appropriate. Other analytics software tools will be discussed.

Registration Fees:
Member: $795
Non-Member: $1,145

Analytics Based Enterprise Performance Management

1 Day | 0.7 CEUs

Overview:
This course offers the latest on Big Data and data visualization. Engineers, managers and anyone who wants to understand how Big Data will impact their operations will be introduced to the fundamentals of engineering analytics, that is, the process of leveraging data into actionable insights. These strategies will be applicable to a wide range of applications including customer segmentation for better resource utilization, improved performance tracking for diagnosis and maintenance, classification strategies for improved inventory management, better use of sales data for increased revenues and customer satisfaction, and better forecasts. Basic methods will be introduced in the areas of descriptive and predictive analytics and Big Data. Participants will gain hands-on experience through the use of case studies and example problem demonstrations. Microsoft-based tools such as Excel will be used when appropriate. Other analytics software tools will be discussed.

Registration Fees:
Member: $395
Non-Member: $545

Statistics

2 Days | 1.4 CEUs

Overview:
In this course, you will learn how to summarize small samples or large amounts of data graphically and mathematically to reach sound conclusions; utilize the predictive power of probability distributions to project process performance in advance; accurately estimate population characteristics; evaluate sample data; analyze data that does not fit into a particular
distribution pattern; develop mathematical models to predict business results; and determine the strength and direction of the relationship between two variables.

**Registration Fee:**
Member: $795  
Non-Member: $1,145

### Statistical Quality Control

**3 Days | 2.1 CEUs**

**Overview:**
Statistical process control (SPC) involves using statistical techniques to measure and analyze the variation in processes. Most often used for manufacturing processes, the intent of SPC is to monitor process quality and maintain processes to fixed targets. SPC is used to monitor the consistency of processes used to manufacture a product as designed. It aims to get and keep processes under control. No matter how good or bad the design, SPC can ensure that the product or service is being produced as designed and intended. Thus, SPC will not improve a poorly designed product's reliability, but can be used to maintain the consistency of how the product is made and, therefore, of the manufactured product itself and its as-designed reliability.

**Registration Fees:**
Member: $1,595  
Non-Member: $1,945

### Healthcare Labor Management

**2 Days | 1.4 CEUs**

*Online Course Available*

**Overview:**
In today’s healthcare environment, labor expense is typically 50 percent of a healthcare system’s annual budget. With software and support available in the industry today, an effective labor management program is within reach of all hospitals and health systems, regardless of their facility size or internal technical expertise. This course will provide an understanding and overview of critical aspects of designing and executing a comprehensive labor management program.

**Registration Fees:**
SHS Member*: $745  
Member: $795  
Non-Member: $1,145  
*Society for Health Systems (SHS) – For details, visit [www.iise.org/SHS](http://www.iise.org/SHS)

### Lean Management Systems for Healthcare

**2 Days | 1.4 CEUs**

*Online Course Available*

**Overview:**
Lean transformation requires an effective management system to support and sustain your improvement efforts and projects. Lean daily management (LDM) is key to any long-lasting lean transformation. Many hospitals around the United States are starting to reap the benefits. Benefits such as a 25–30 percent increase in overall revenues, 15–20 percent increase in a patient satisfaction score, in addition to saving millions of dollars in supplies, labor and overtime costs.

**Registration Fees:**
SHS Member*: $745  
IISE Member: $795  
Non-Member: $1,145  
*Society for Health Systems (SHS) – For details, visit [www.iise.org/SHS](http://www.iise.org/SHS)

### Lean Green Belt for Healthcare

**3 Days | 2.1 CEUs**

**Overview:**
This three-day course provides an in-depth understanding of lean enterprise principles and how to apply them within your healthcare organization. Your lean journey begins with a series of interactive simulations that demonstrate how each
The lean concept is applied and its impact on the process. Mapping the process flow and identifying the activities that add value from the customer’s perspective is the cornerstone of this class. The class is then given a scenario and the students simulate the conversion from traditional to lean in a practical hands-on environment. The course also provides a structure for how to manage a lean process for continuous improvement within the healthcare environment. **The exam is included in the course fee.** Participants who pass the exam will receive the IISE Lean Green Belt Certificate.

**Registration Fees:**
- Member: $1,195
- Non-Member: $1,545

**Lean Green Belt for Healthcare**
3 Days | 2.1 CEUs

**Overview:**
This three-day course provides an in-depth understanding of lean enterprise principles and how to apply them within your healthcare organization. Your lean journey begins with a series of interactive simulations that demonstrate how each lean concept is applied and its impact on the process. Mapping the process flow and identifying the activities that add value from the customer’s perspective is the cornerstone of this class. The class is then given a scenario and the students simulate the conversion from traditional to lean in a practical hands-on environment. **The exam is included in the course fee.** Participants who pass the exam will receive the IISE Lean Green Belt Certificate.

**Registration Fees:**
- Member: $1,195
- Non-Member: $1,545

**Six Sigma Green Belt for Healthcare**
3 Days | 2.1 CEUs

*Online Course Available

**Overview:**
Learn how to integrate principles of business, statistics, waste reduction and engineering to achieve tangible results in the healthcare arena. Master the use of Lean Six Sigma to quantify the critical quality issues in your company. Once the issues have been quantified, Lean and Six Sigma analysis, including statistics, can be applied to provide probabilities of success and failure. Lean and Six Sigma methods increase productivity and enhance quality. As a Lean Six Sigma Green Belt, you will be equipped to support and champion Lean Six Sigma implementation in your organization. **The exam is included in the course fee.** Participants who pass the exam will receive the IISE Lean Six Sigma Green Belt Certificate.

**Registration Fees:**
- Member: $1,995
- Non-Member: $2,345

**Lean Six Sigma Black Belt for Healthcare**
20 Days | 14.0 CEUs

**Overview:**
Lean techniques eliminate wasteful activities, while Six Sigma is a disciplined method for meeting customers’ expectations and eliminating defects in any process. IISE’s Lean Six Sigma Training offers the unique approach of weaving both lean and Six Sigma methodologies into a seamless certificate program that can help you achieve substantial improvements in your
healthcare organization. By completing this course of study, you will gain a solid general knowledge of the theory, composition and implementation of a Lean Six Sigma initiative. You will also become proficient in all of the analytical tools necessary to define, measure, analyze, improve, implement and control healthcare improvement projects. The exam is included in the course fee. Participants who pass the exam will receive the IISE Lean Six Sigma Black Belt Certificate.

Registration Fees:
Member: $7,995
Non-Member: $9,245

Principles in Patient Flow and Throughput
2 Days | 1.4 CEUs
*Online Course Available

Overview:
This course presents common patient flow challenges and explores the system dynamics affecting patient throughput across the entire enterprise. We will cover industrial engineering concepts and tools you can use to develop metrics and conduct PI projects to evaluate and improve your institution’s patient flow throughout the entire patient encounter.

Registration:
SHS Member*: $745
IISE Member: $795
Non-Member: $1,145
*Society for Health Systems (SHS) – For details, visit www.iise.org/SHS

LEADERSHIP AND MANAGEMENT SKILLS

Certified Value Engineering Workshop
5 Days | 3.5 CEUs

Overview:
Yesterday’s competitive battle was the United States vs. Japan vs. the European Union vs. the developing world. Today’s battle is focused on the value proposition, the implementation of creative ideas. The only way to ensure real growth is to differentiate with innovative products, services and processes. Creativity and innovation have become mission-critical business skills for coping with a world of accelerating change. The battle is challengers vs. market leaders; disruptive technologies vs. developed products; the power of market share vs. the power of imagination and processes. This course can help you achieve your objectives with proven value management processes that tackle the very factors that control your profitability.

Registration Fees:
Member: $795
Non-Member: $945

Cost of Quality
2 Days | 1.4 CEUs

Overview:
Successful use of CoQ shifts the focus from a quality cost system to using CoQ as an effective tool in the selection and management of improvement efforts. Participants are asked to bring a laptop computer. You will receive a software program that will make tracking the cost of quality a “breeze.”

What You Will Learn:
• Explain direct costs of quality
• Explain hidden costs of quality
• Define major categories of quality costs
• Prepare a cost of quality summary report
• Use quality costs to drive process improvement

Registration Fees:
Member: $795
Non-Member: $1,145

Engineering Decision Making & Risk Management
3 Days | 2.1 CEUs

Overview:
In the course of engineering design, project management and other functions, engineers have to make decisions, almost always under time and budget constraints. Managing risk requires making decisions in the presence of uncertainty. In this course students will develop two critical skills: choosing the right alternative and executing the right decision-making process. These skills will help students improve decision making and reduce risk in their engineering activities and organizations. This course will cover material on individual decision making, decision-making processes and risk management.

Registration Fees:
Member: $1,195
Non-Member: $1,545

Financial Management for Engineers
2 Days | 1.4 CEUs

Overview:
In today’s workplace, it is nearly impossible for an engineer to perform without considering the financial impact of every action on the organization’s bottom line. Traditional industrial engineering decision-making tools are not always sufficient to help cut through to the bottom line. Make your profit center shine with sound financial management to supplement good engineering and other technology. This course introduces basic financial management to engineers and technical personnel who need this knowledge to manage a profit center effectively. It also covers the analysis necessary for such long-term financial decisions as issuance of stock or
bonds; contracting of leases or loans and financing of a new enterprise; mergers, capital budgeting, the cost of capital and the valuation of a business.

**Registration Fees:**
- Member: $795
- Non-Member: $1,145

**From Engineer to Leader**
2 Days | 1.4 CEUs

**Overview:**
Leadership is learned. To lead in the 21st century, highly technical organizations require knowledge that is not always self-evident or easily learned by reading. If you are transitioning from technical responsibility to managerial responsibility, this course is your opportunity to learn the skills needed to be an outstanding leader and manager. The course is aimed at increasing your awareness and skill level in analyzing your leadership style, possible leadership styles and how they may or may not be effective in a specific organization. The course will then move into management basics that will give you a structure to be an outstanding manager in different situations.

**Registration Fees:**
- Member: $795
- Non-Member: $1,145

**Information Security**
5 Days | 3.5 CEUs

**Overview:**
Learn how to integrate principles of business, risk management, information technology and security and engineering to achieve tangible results in increasing the security of your organization’s information. Master the use of risk assessment to quantify critical information security (InfoSec) issues in your practice and company. By completing this course, you will be equipped to support and champion the implementation of sound InfoSec practices in your organization. Participants who pass the course exam will receive IISE’s Information Security Certification. **The exam is included in the course fee.**

**Registration Fee:**
- Member: $1,995
- Non-Member: $2,345

**Introduction to Supply Chain Management**
2 Days | 1.4 CEUs

**Overview:**
Supply chain management (SCM) is the oversight of materials, information and finances as they move in a process from supplier to manufacturer to wholesaler to retailer to consumer. Supply chain management involves coordinating and integrating these flows both within and among companies. It is said that the ultimate goal of any effective supply chain management system is to reduce inventory (with the assumption that products are available when needed).

**Registration Fees:**
- Member: $795
- Non-Member: $1,145

**Lean Management Systems for Healthcare**
See pg. 11

**Project Management Fundamentals**
2 Days | 1.4 CEUs
*Online Course Available

**Overview:**
Industrial engineers and others associated with productivity improvement in service or manufacturing organizations often must become project leaders. This seminar focuses on the skills needed to lead and manage projects successfully in those settings. During this seminar, you will develop a simulated project plan as well as an initial plan for a project at your own facility that you will present for seminar discussion. The seminar presentation will use the definitions and language of ANSI/PMI 99-001-2000, the project management body of knowledge standard.

**Registration Fees:**
- Member: $795
- Non-Member: $1,145

**Quality 101**
1 Day | 0.7 CEUs

**Overview:**
The course provides an introduction to the field of quality improvement and control. It highlights the historical development of the field as well as examining the current strategies used for quality improvement including Six Sigma and ISO 9000. You will learn how about the history of quality and quality control; the challenges facing continuous quality improvement; the differences between quality control and quality improvement and how to explain the benefits of process mapping.

**Registration Fees:**
- Member: $395
- Non-Member: $475

**Transforming Your Organization**
3 Days | 2.1 CEUs

**Overview:**
According to research, nearly 70 percent of continual improvement transformation initiatives, such as lean enterprise or Six Sigma, fail to achieve their intended results. Successful-
ly institutionalizing, not just implementing, transformation in your organization requires in-depth knowledge and proven strategies to address the most critical factor of change, the human dimension. Attend this seminar and learn how to keep your organization from becoming a negative statistic.

**Registration Fees:**
Member: $1,195
Non-Member: $1,545

**Warehousing Management**
2 Days | 1.4 CEUs

**Overview:**
This course is designed to familiarize the student with the role of the warehousing function in the economy and its relationship to the logistics process. Details are provided on warehousing operations, fulfillment, inventory management, layout, materials handling equipment, packaging, labor and productivity, cost controls and private vs. public warehousing, including workshop case studies.

**Registration Fees:**
Member: $795
Non-Member: $1,145

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**LEAN**

**Adapting Lean for High-Mix Low-Volume Facilities**
2 Days | 1.4 CEUs

**Overview:**
This course will teach you how to adapt lean for the hundreds of high-mix low-volume manufacturing facilities such as forge shops, machine shops, fabrication shops, molding shops, etc. and how to either adopt, adapt or completely replace the lean tools with appropriate tools suited for high-mix low-volume components production facilities. By the end of this course, you will also know why and how facility layout and finite capacity scheduling are at the core of an approach for comprehensive implementation of JobshopLean.

**Registration Fees:**
Members: $795
Non-Members: $1,145

**Kaizen**
1 Day | 0.7 CEUs

**Overview:**
This one-day seminar is a lean implementation event that involves a series of activities that follow a structured ten-step process enabling a team to achieve rapid, action-oriented improvements identified during a Value Stream Mapping event. The kaizen event addresses individual problem areas identified by process mapping, using the industry-standard Plan-Do-Check-Act problem-solving model.

**Registration Fees:**
Member: $395
Non-Member: $475

**Lean Yellow Belt**
1 Day | 0.7 CEUs

*Class available in Los Angeles

**Overview:**
A lean enterprise views itself as part of an extended value chain, focusing on the elimination of waste between you and your suppliers and you and your customers. This one-day seminar is the first step in learning the principles of lean. The instructors for this course have extensive experience implementing lean principles worldwide. This seminar will teach you the history and basics of lean and demonstrate why these practices have such a significant impact on operations. The live course features an interactive simulation that illustrates lean principles. **The exam is included in the course fee.** Participants who pass the exam will receive the IIE Lean Yellow Belt Certificate. **Also known as the Lean Six Sigma White Belt.**

**Registration Fees:**
Member: $395
Non-Member: $475

**Lean Green Belt**
3 Days | 2.1 CEUs

*Online Course Available

**Overview:**
This three-day course provides an in-depth understanding of lean enterprise principles and how to apply them within your organization. Your lean journey begins with a series of interactive simulations that demonstrate how each lean concept is applied and its impact on the process. Mapping the process flow and identifying the activities that add value from the customer’s perspective is the cornerstone of this class. The class is then given a scenario and the students simulate the conversion from traditional to lean in a practical hands-on environment. The course also provides a structure for how to manage a lean process for continuous improvement. **The exam is included in the course fee.** Participants who pass the exam will receive the IIE Lean Green Belt Certificate.

**Registration Fees:**
Member: $1,195
Non-Member: $1,545

**Lean Green Belt for Healthcare**
See pg. 12

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Lean Black Belt
8 Days | 5.6 CEUs
*Online Course Available

Overview:
This course is designed to prepare the black belt or “master practitioner” for implementing lean across the enterprise. It will lay the groundwork for building a lean enterprise transformation by portraying the entire spectrum of a lean transformation from traditional processes to a lean product delivery system. This eight-day program is divided into two separate four-day programs. Participants are required to submit a project for evaluation after completing the training program. The exam is included in the course fee. Participants who successfully complete a project and pass the online exam will receive the IISE Lean Black Belt Certificate.

Registration Fees:
Member: $3,195
Non-Member: $3,545

Lean Black Belt for Healthcare
8 Days | 5.6 CEUs

Overview:
This course is designed to prepare the black belt or “master practitioner” for implementing lean throughout the healthcare organization. It will lay the groundwork for building a lean healthcare transformation by portraying the entire spectrum of a lean transformation. This eight-day program is divided into two separate four-day programs. Participants are required to submit a project for evaluation after the first course before completing the second course. The exam is included in the course fee. Participants who successfully complete a project and pass the online exam will receive the IISE Lean Black Belt Certificate.

Registration Fees:
Member: $3,195
Non-Member: $3,545

Lean Master Black Belt
20 Days | 14.0 CEUs

Overview:
The lean title of master black belt is the highest level of recognition that a lean practitioner can attain. It is normally an indication that the holder of the designation has completed a significant number of process improvements as well as serving as a mentor, coach and teacher for other lean participants. The lean master black belt is an experienced black belt, coach, trainer and champion of lean. The designation is not given lightly. In order to be recognized as an LMBB, certain core competencies need to be demonstrated. In this program you will be evaluated on your performance as it relates to your knowledge and proficiency in lean, teaching lean and coaching green and black belts. The exam is included in the course fee.

Registration Fees:
Member: $7,200
Non-Member: $7,500

No courses scheduled – for availability, contact Larry Aft, P.E., IISE director of continuing education, at (770) 349-1130 or laft@iise.org.

Lean Scrum
2 Days | 1.4 CEUs

Overview:
Learn to use Scrum methodology to provide quality products and services; faster, better and more affordable. Scrum is a cooperative and collaborative practice for executing projects using a rapid fire team implementation for transforming an organization. Beyond optimizing speed, quality and cost, Scrum also proves to motivate the individuals involved in a project. This two-day program incorporates both Agile and Lean principles. When completed, participants will know contemporary techniques and new ideas that will generate enthusiasm and energy for this new way of successfully changing processes, products, services and organizations.

The original Scrum implementation focused on Software Development and IT professionals. This program expands Scrum thinking, tools and methods to cover other industries such as finance, government, healthcare, telecommunications, construction, education, aerospace, insurance, automotive, manufacturing, supply chain, and any other industry seeking solutions to complex problems in a high quality, swift and inexpensive way.

Registration Fees:
Member: $795
Non-Member: $1,145

Lean, TOC and Six Sigma
3 Days | 2.1 CEUs

Overview:
In this seminar, you will learn the basic concepts of theory of constraints (TOC), lean and Six Sigma. You will examine how the application of these programs can result in increased performance, reduced waste and improved predictability.

Registration Fees:
Member: $1,195
Non-Member: $1,545

Process Management
2 Days | 1.4 CEUs
Overview:
In this course, you will learn how to apply lean tools and methods to help determine where bottlenecks are, identify non-value-added operations and develop a workable plan for process improvement projects.

Registration Fee:
Member: $795
Non-Member: $1,145

LEAN SIX SIGMA

Lean Six Sigma Yellow Belt**
1 Day | 0.7 CEUs

Overview:
Concepts and methodologies are explained and illustrated. Participants learn about value streams, waste and basic lean tools as well as data collection and the interpretation of the data, specifically as it relates to the processes. A portion of this class will be dedicated to a discussion of how healthcare organizations apply the tools and methods in support of robust performance. **Also known as the Lean Six Sigma White Belt.

Registration Fees:
Member: $395
Non-Member: $475

Lean Six Sigma Green Belt
5 Days | 3.5 CEUs
*Online Course Available

Overview:
Learn how to integrate principles of business, statistics, waste reduction and engineering to achieve tangible results. Master the use of Lean Six Sigma to quantify the critical quality issues in your company. Once the issues have been quantified, Lean and Six Sigma analysis, including statistics, can be applied to provide probabilities of success and failure. Lean and Six Sigma methods increase productivity and enhance quality. As a Lean Six Sigma Green Belt, you will be equipped to support and champion Lean Six Sigma implementation in your organization. The exam is included in the course fee. Participants who pass the exam will receive the IISE Lean Six Sigma Green Belt Certificate.

Registration Fees:
Member: $1,995
Non-Member: $2,345

Lean Six Sigma Black Belt
20 Days | 14.0 CEUs
*Online Course Available

Overview:
Learn how to integrate principles of business, statistics, waste reduction and engineering to achieve tangible results in the healthcare arena. Master the use of Lean Six Sigma to quantify the critical quality issues in your company. Once the issues have been quantified, Lean and Six Sigma analysis, including statistics, can be applied to provide probabilities of success and failure. Lean and Six Sigma methods increase productivity and enhance quality. As a Lean Six Sigma Green Belt, you will be equipped to support and champion Lean Six Sigma implementation in your organization. The exam is included in the course fee. Participants who pass the exam will receive the IISE Lean Six Sigma Green Belt Certificate.

Registration Fees:
Member: $7,995
Non-Member: $9,245

Lean Six Sigma Black Belt for Healthcare
20 Days | 14.0 CEUs

Overview:
Learn techniques eliminate wasteful activities, while Six Sigma is a disciplined method for meeting customers’ expectations and eliminating defects in any process. IISE’s Lean Six Sigma Training offers the unique approach of weaving both Lean and Six Sigma methodologies into a seamless certificate program that can help you achieve substantial improvements in your organization. By completing this course of study, you will gain a solid general knowledge of the theory, composition and implementation of a lean Six Sigma initiative. You will also become proficient in all of the analytical tools necessary to define, measure, analyze, improve, implement and control improvement projects. Participants must provide a windows-based computer running Microsoft Office for the training program. The exam is included in the course fee. Participants who complete the course requirements will receive the IISE Lean Six Sigma Black Belt Certificate.

Registration Fees:
Member: $7,995
Non-Member: $9,245

Lean Six Sigma Black Belt for Healthcare

Overview:
Lean techniques eliminate wasteful activities, while Six Sigma is a disciplined method for meeting customers’ expectations and eliminating defects in any process. IISE’s Lean Six Sigma Training offers the unique approach of weaving both lean and Six Sigma methodologies into a seamless certificate program that can help you achieve substantial improvements in your healthcare organization. By completing this course of study, you will gain a solid general knowledge
of the theory, composition and implementation of a Lean Six Sigma initiative. You will also become proficient in all of the analytical tools necessary to define, measure, analyze, improve, implement and control healthcare improvement projects. Participants must provide a windows-based computer running Microsoft Office for the training program. The exam is included in the course fee. Participants who complete the course requirements will receive the IISE Lean Six Sigma Black Belt Certificate.

**Registration Fees:**
Member: $7,995  
Non-Member: $9,245

**Lean Six Sigma Master Black Belt**  
20 Days | 14.0 CEUs

**Overview:**  
The Lean Six Sigma title of master black belt is the highest level of recognition that a Lean Six Sigma practitioner can attain. It is normally an indication that the holder of the designation has completed a significant number of process improvements as well as serving as a mentor, coach and teacher for other Six Sigma participants. The Lean Six Sigma Master Black Belt is an experienced black belt, coach, trainer and champion of Lean Six Sigma. The designation is not given lightly. In order to be recognized as a LSSMBB, certain core competencies need to be demonstrated. In this program you will be evaluated on your performance as it relates to your knowledge and proficiency in Lean Six Sigma, teaching Lean Six Sigma and coaching green and black belts. The exam is included in the course fee. Participants who complete the course requirements will receive the IISE Lean Six Sigma Master Black Belt Certificate.

**Registration Fees:**
Member: $7,200  
Non-Member: $7,500

No courses scheduled – for availability, contact Larry Aft, P.E., IISE director of continuing education, at (770) 349-1130 or laft@iise.org.

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**SIX SIGMA**

**Six Sigma Yellow Belt**  
1 Day | 0.7 CEUs  
*Online Course Available*

**Overview:**  
Demystify this topic with this seminar that includes a discussion of the Define-Measure-Analyze-Improve-Implement-Control (DMAIIC) methodology. This seminar will provide you with an overview of the basic philosophy, organization and methodology for Six Sigma quality and introduce you to the Six Sigma topics of variation, process capability and root cause analysis. Note: Individuals planning to take Six Sigma Green Belt should not take this course. The exam is included in the course fee. Participants who pass the exam will receive the IISE Six Sigma Yellow Belt Certificate.

**Registration Fees:**
Member: $395  
Non-Member: $475

**Six Sigma Green Belt for Process Improvement**  
3 Days | 2.1 CEUs  
*Classes also available in Kalamazoo, MI, and Los Angeles*

**Overview:**  
Learn how to integrate principles of business, statistics and engineering to achieve tangible results. Master the use of Six Sigma to quantify the critical quality issues in your company. Once the issues have been quantified, statistics can be applied to provide probabilities of success and failure. Six Sigma methods increase productivity and enhance quality. As a Six Sigma Green Belt, you will be equipped to support and champion Six Sigma implementation in your organization. The final afternoon of the class you will have the option to take IISE’s Green Belt exam. The exam is included in the course fee. Participants who pass the exam will receive the IISE Six Sigma Green Belt Certificate.

**Registration Fee:**
Member: $1,195  
Non-Member: $1,545

**Six Sigma Green Belt for Healthcare**  
3 Days | 2.1 CEUs

**Overview:**  
Learn how to integrate principles of business, statistics and engineering to achieve tangible results. Master the use of Six Sigma to quantify the critical quality issues facing healthcare. Once the issues have been quantified, statistics can be applied to provide probabilities of success and failure. Six Sigma meth-
ods increase productivity and enhance quality. As a Six Sigma Green Belt, you will be equipped to support and champion Six Sigma implementation in your healthcare organization. **The exam is included in the course fee.** Participants who pass the exam will receive the IISE Six Sigma Green Belt Certificate.

**Registration Fees:**
Member: $1,195  
Non-Member: $1,545

**Six Sigma Black Belt**  
15 Days | 10.5 CEUs  
*Online Course Available*

**Overview:**
Learn the advanced problem-solving skills you need to implement the principles, practices and techniques of Six Sigma to maximize performance and cost reductions in your organization. During this three-week practitioner course, you will learn how to measure a process, analyze the results, develop process improvements and quantify the resulting savings. You will be required to complete a project demonstrating mastery of appropriate analytical methods and pass an examination to earn IISE’s Six Sigma Black Belt Certificate. **The exam is included in the course fee.** Participants who pass the exam will receive the Six Sigma Black Belt Certificate.

**Registration Fees:**
Member: $5,995  
Non-Member: $7,245

**Six Sigma Black Belt for Healthcare**  
15 Days | 10.5 CEUs

**Overview:**
Learn the advanced problem-solving skills you need to implement the principles, practices and techniques of Six Sigma to maximize performance and cost reductions in your healthcare organization. During this three-week practitioner course, you will learn how to measure a process, analyze the results, develop process improvements and quantify the resulting savings. You will be required to complete a project demonstrating mastery of appropriate analytical methods and pass an examination to earn IISE’s Six Sigma Black Belt Certificate. **The exam is included in the course fee.** Participants who pass the exam will receive the Six Sigma Black Belt Certificate.

**Registration Fees:**
Member: $5,995  
Non-Member: $7,245

**Six Sigma Master Black Belt**  
20 Days | 14.0 CEUs

**Overview:**
The Six Sigma title of master black belt is the highest level of recognition that a Six Sigma practitioner can attain. It is normally an indication that the holder of the designation has completed a significant number of process improvements as well as serving as a mentor, coach and teacher for other Six Sigma participants. The Six Sigma master black belt is an experienced black belt, coach, trainer and champion of Six Sigma. In this program you will be evaluated on your performance as it relates to your knowledge and proficiency in Six Sigma, teaching Six Sigma and coaching green and black belts. **The exam is included in the course fee.** Participants who pass the exam will receive the IISE Six Sigma Master Black Belt Certificate.

**Registration Fees:**
Member: $7,200  
Non-Member: $7,500

No courses scheduled – for availability, contact Larry Aft, P.E., IISE director of continuing education, at (770) 349-1130 or laft@iise.org.

**Design for Six Sigma**  
2 Days | 1.4 CEUs

**Overview:**
Design for Six Sigma (DFSS) is a business process focused on improving profitability. Properly applied, it generates the right product at the right time at the right cost. You will be provided with the framework, tools and processes for a proven, superior approach to developing a new product and associated processes from inception to production sign off: DMADV (Define, Measure, Analyze, Design, Validate). The course has two complementary goals: (1) Provide all participants with an overview, motivation, and structure for DFSS; and (2) Provide an opportunity for participants who are currently developing a new product or process to apply the DFSS road map to their projects.

**Registration Fees:**
Member: $795  
Non-Member: $1,145

**Six Sigma Transactional Analysis**  
3 Days | 2.1 CEUs

**Overview:**
Although originally introduced by the manufacturing sector, Six Sigma is rapidly gaining the attention of many companies in the service sector. From employees of health insurance providers and credit card companies to uniform service providers, this course will give a better understanding of the flow of the Six Sigma process and what tools to use when, as well as the proper way to use each tool.
**TECHNICAL SKILLS**

### Design of Experiments
2 Days | 1.4 CEUs

**Overview:**
This course provides the framework for creating experimental designs that lay out a detailed experimental plan in advance of doing the experiment. In industrial settings, the primary goal is usually to extract the maximum amount of unbiased information regarding the factors affecting a production process from as few costly observations as possible. In general, every machine used in a production process allows its operators to adjust various settings, affecting the resultant quality of the product manufactured by the machine. Experimentation allows the engineer to adjust the settings of the machine in a systematic manner and to learn which factors have the greatest impact on the resultant quality. Using this information, the settings can be constantly improved until optimal quality is obtained.

**Registration Fees:**
- Member: $795
- Non-Member: $1,145

### Introduction to Industrial Engineering
3 Days | 2.1 CEUs

**Overview:**
This core course arms you with the skills to create process improvement and performance enhancement for your company. Learn how industrial engineering tools streamline organizations, facilities, plants, tools, processes, methods and work environments for optimal effectiveness. Discover the responsibilities and practices of an industrial engineer. Whether you work in manufacturing, service or government, this course shows you how to use industrial engineering techniques as competitive tools to improve your organization.

**Registration Fees:**
- Member: $1,195
- Non-Member: $1,545

### PE Exam Review for Industrial Engineers
4 Days | 2.8 CEUs

*Online Course Available*

**Overview:**
Improve your odds of passing the most important test of your career with this popular review course. Licensure for professional engineers opens the door to a world of opportunity and career development, but first you must pass two exams: The Fundamentals of Engineering exam and the PE exam. The course instructors will cover all major elements of the PE exam, refreshing your knowledge of IE topics, terminology and formulas; working through practice problems; and identifying areas you need to focus on during your exam prep.

**Registration Fees:**
- Member: $1,595
- Non-Member: $1,945

### Reliability Engineering Excellence
5 Days | 3.5 CEUs

**Overview:**
The reliability engineer (RE) sees all aspects of proper plant function, puts equipment first and makes decisions based on how machines function and their impact on production. Just as a business adviser must balance policy and diplomacy, the RE must be dedicated to preserving asset reliability and managing risk. In this five-day course, you will learn what it means to be a reliability engineer, how to build and sustain a strategic reliability engineering program and how to gain support from other departments to achieve your facility’s reliability goals.

**Registration Fees:**
- Member: $1,995
- Non-Member: $2,345

### Simulation
2 Days | 1.4 CEUs

**Overview:**
Computer simulation is an extremely valuable tool being used more and more in industry and government to assist in the design, creation and evaluation of complex systems. This course will equip you to assist in the design of large-scale systems, evaluate alternative courses of action and improve the efficiency of your manufacturing or service center. The instructor will take you step by step through the key ideas of computer simulation. Along the way, you will see examples of the mathematical and statistical concepts you will need to perform a valid simulation study. A practical, hands-on approach will be taken and each concept will be supplemented with case studies using a popular, easy-to-use simulation package featuring graphical animation capabilities.

**Registration Fees:**
- Member: $795
- Non-Member: $1,145
The technical skills used by industrial and systems engineers are continually evolving. These courses not only provide introductory knowledge but also stress applications of the developing ISE tools that are used in the business world today.

WORK MEASUREMENT AND DESIGN

Work Measurement
2 Days | 1.4 CEUs
*Online Course Available

Overview:
With the advent of new technologies, some companies have moved away from using work standards — and performance has suffered. Work measurement is no longer just a time study. For next generation companies, work measurement has become a knowledge-centered activity providing complete knowledge of the human-process interface. Return to the roots of managing business processes. Learn the importance of using work standards and discover why they are key elements of the management information system necessary for process improvements and lean manufacturing.

Registration Fees:
Member: $795
Non-Member: $1,145

Healthcare Labor Management
See pg. 11

Facilities and Workplace Design
2 Days | 1.4 CEUs

Overview:
Complex, convoluted workflow is the root cause of many production bottlenecks. The plant layout primarily determines workflow in layouts, streamlining operations and reducing material flow by as much as 80 percent. Participants in this seminar will learn to recognize design issues and will have hands-on practice redesigning a space to optimize space utilization.

Registration Fees:
Member: $795
Non-Member: $1,145

Methods-Time Measurement – UAS
5 Days | 3.5 CEUs

Overview:
This version of MTM was developed for processes exhibiting the characteristic features of batch production. The following should exist as application conditions:

• Order-oriented production of a repetitive nature
• Repeatable work content despite a large range of product types and varieties
• Length of work cycles considerably longer than in high-volume production
• Defined general conditions for work processes
• Designed processes
• Experienced employees
• Work instruction without detailed description of methods

Methods-Time Measurement
10 Days | 7.0 CEUs

Overview:
Methods-Time Measurement (MTM-1) is a procedure which analyzes any manual operation or method into the Basic Motions required to perform it, and assigns to each motion a predetermined time standard, which is determined by the Influencing Factors under which it is made. MTM-1 is used for Process Type 1 activities.

Registration Fees:
Member: $3,995
Non-Member: $4,345

Basic MODAPTS Practitioner Certification
3 Days | 2.1 CEUs

Overview:
Learn how to use the fastest-growing and easiest-to-use work measurement system, to achieve tangible business results using reliable data. By the end of this course, you can expect to:

• Be fluent in the language and use of the MODAPTS work measurement system
• Apply MODAPTS methods for setting work standards
• Analyze and improve existing work methods utilizing MODAPTS
• Improve the ergonomics and productivity of work tasks
• Apply knowledge gained through this course in order to test to become a Certified MODAPTS practitioner by the International MODAPTS Association, (IMA).

After completing the course materials, you will have the option to take IMA's Basic MODAPTS Practitioner Certification exam online. The exam is included as part of the course fee. Participants who pass the exam receive the IMA's Certificate.

Registration Fees:
Member: $1,195
Non-Member: $1,545

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Registration Fees:
Member: $1,995
Non-Member: $2,345

**Principles of Occupational Ergonomics**
3 Days | 2.1 CEUs
*Online Course Available*

**Overview:**
This three-day workshop introduces you to basic ergonomics principles and addresses topics such as: musculoskeletal disorders (MSDs) and other ergonomics-related problems, identifying and prioritizing ergonomic stressors, determining root causes, analysis techniques, developing appropriate control measures and design criteria. This workshop prepares you to conduct both industrial and office assessments for the control of ergonomic stressors that could potentially lead to the development of work-related musculoskeletal disorders. The course mixes lecture and “hands-on” laboratory sessions to allow you to apply techniques that will facilitate feasible, effective and justifiable solutions. This course is offered in conjunction with the Ergonomics Center of North Carolina.

**Registration Fees:**
AES Member: $1,145
IISE Member: $1,195
Non-Member: $1,545
*Applied Ergonomics Society (AES) – For details, visit [www.iise.org/AES](http://www.iise.org/AES)*

**Staffing Models & Human Capital Management**
2 Days | 1.4 CEUs

**Overview:**
Staffing models are an extremely valuable planning tool when executives need reliable estimates of human capital needs for current and future reporting periods. Staffing model application results support organizational performance measurement, strategic planning, capital investment planning, operations cost analyses, employment planning and more. Staffing models are especially useful when similar functions are performed in multiple locations.

**What You Will Learn:**
- Where staffing models fit in a human capital management framework
- Seven types of required data
- Where and how work measurement relates to staffing models
- Terminology associated with work measurement and staffing models
- Staffing model development phases

**Registration Fees:**
Member: $795
Non-Member: $1,145

**Standard Data Systems**
2 Days | 1.4 CEUs

**Overview:**
This two-day course provides an in-depth understanding of standard data systems and the analytics involved in developing them within your organization. Multiple case studies show how to apply statistical tools to existing data in order to create accurate and reliable standard data systems.

**Registration Fees:**
Member: $795
Non-Member: $1,145

**CORPORATE TRAINING**

**Custom Corporate Training to Advance Productivity and Your Bottom Line**

IIE has significantly advanced business goals for companies of all sizes and sectors through our highly regarded corporate training programs. We create training solutions that drive impactful organizational change.

IIE corporate training is your key to productivity success. Here’s why:

**We offer corporate training options that work for you.**

- All of our classroom topics, including Lean, Six Sigma and Lean Six Sigma, can be integrated into fully customized corporate training packages to efficiently deliver the cost-effective solutions you need.
- We tailor our training to your corporate objectives, taking into consideration your company’s culture and values, as well as your team members’ needs and strengths.
- Our instructors are experts in applying the industrial engineering principles and practices they teach, and are able to create dynamic, interactive and productive learning environments.
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