Corporate and Professional Education

System Dynamics

Improving Decision Making and Strategic Thinking

Worcester Polytechnic Institute
Corporate and Professional Education

508-831-5517 | online@wpi.edu | online.wpi.edu

LIMITLESS OPPORTUNITY | GLOBAL IMPACT | PREMIER PROGRAM
Admissions Criteria

WPI graduates are aggressively recruited by local, national, and international organizations, because they are ready to solve real-world problems. This preparation begins at admission, with individualized advising to help build a course of study. Every student gets the one-on-one mentorship and applied learning opportunities that are hallmarks of the WPI experience.

Students must hold a bachelor’s degree, in any area of study, in order to be admitted into our system dynamics graduate programs. A facility for logical and expansive reasoning can be helpful for this topic. The MS program allows you to take up to two WPI courses before formal admission into the program.

Learn about admission requirements, class registration, and program schedules at online.wpi.edu/+sysdyn.

Are you ready to advance your career?

To begin the admission process, contact us at 508-831-5517 or online@wpi.edu.

Complex business problems exist in all types of organizations. Are you able to analyze situations, suggest policies, and effectively implement solutions?
Drive Strategic Performance

By developing a system perspective, you can strategically analyze and direct organizations in today’s industries—an expertise that is a critical ingredient for staying competitive. Through Worcester Polytechnic Institute’s online system dynamics graduate programs, students are able to enhance their decision-making abilities, determine effects of business decisions, and analyze situations to identify paths of actions.

**Master of Science**

*Designed by you and a faculty advisor, this 10-course program allows you to select classes that may best advance your career opportunities.*

**Graduate Certificate**

*Through five enlightening courses, you gain a deeper understanding of the complexities surrounding business issues and how to deal with them.*

**Single Courses**

*You may not be interested in an entire graduate program, so you can take individual courses per your discretion.*

**Discover how system dynamics at WPI can help you:**

+ enable experts to reach a consensus
+ determine the impact of policy changes
+ guide managers to think more strategically
+ think holistically to bring a different perspective

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“For me, system dynamics is more than a technical toolset; it has become a paradigm and a way of thinking. Online learning at WPI enabled me to travel and gain invaluable professional experience while I studied—and my experience evolved alongside my knowledge in system dynamics.”

**SARAH BOYAR**  
SYSTEM DYNAMICS CONSULTANT
Our internationally-renowned faculty will help you discover new strategies for meeting today’s complex challenges.

Robert Eberlein
ADJUNCT ASSISTANT PROFESSOR
PHD, MASSACHUSETTS INSTITUTE OF TECHNOLOGY
Eberlein is responsible for the initial development of the Venism software package. His research focuses on analysis of dynamic models, applying statistics to dynamics models, and the dynamics of national development, project management, marketing, telecommunications, and manufacturing.

Andrew Ford
ADJUNCT ASSISTANT PROFESSOR
PHD, DARTMOUTH COLLEGE
Ford’s emphasis is on energy and environmental problems. His work, *Modeling the Environment: An Introduction to System Dynamics Modeling of Environmental Systems*, is considered the premier text in this area of dynamics. His research uses system dynamics to study public policy making on energy and the environment with a special focus on the electric power industry.

James Lyneis
ADJUNCT ASSISTANT PROFESSOR
PHD, UNIVERSITY OF MICHIGAN
Possessing a background in system dynamics that shows both depth and breadth, Lyneis focuses on many areas, including project dynamics, marketing and industry behavior, and business strategy. He authored several books and book chapters that are widely used in the field.

John Morecroft
ADJUNCT PROFESSOR
PHD, MASSACHUSETTS INSTITUTE OF TECHNOLOGY
Morecroft’s research and teaching cover the dynamics of firm performance and the use of models and simulation in strategy development. He has led applied research projects for a wide range of international organizations. Recently, he has been investigating growth dynamics, coordination, and sustainability at the firm and global industrial society levels.

Oleg Pavlov
ASSOCIATE PROFESSOR
PHD, UNIVERSITY OF SOUTHERN CALIFORNIA
Pavlov’s expertise is in multi-sector analysis that accounts for feedback and resistance to change often exhibited by real systems. His research examines the interests of stakeholders and takes a system-wide view that combines relevant technological, psychological, social, and economic factors. Typically, he collaborates with teams of co-authors worldwide, and leads teams of students through research projects.
Michael Radzicki
ASSOCIATE PROFESSOR
PHD, UNIVERSITY OF NOTRE DAME
Having created WPI’s program in system dynamics in 1990, Radzicki continues to develop educational opportunities at the university. His research focuses on automated trading system development, predictive analytics, and the application of system dynamics and machine learning tools to macroeconomic problems.

Khalid Saeed
PROFESSOR
PHD, MASSACHUSETTS INSTITUTE OF TECHNOLOGY
Saeed is a professor of economics and system dynamics. Widely recognized for his work on computer modeling and experimental analysis of developmental, organizational, and governance-related issues, he has written extensively on a variety of developmental and management agendas, including sustainable economic development, infrastructure planning, supply chain management, and system dynamics modeling.

Kim Warren
ADJUNCT ASSOCIATE PROFESSOR
PHD, LONDON BUSINESS SCHOOL
Warren spent a decade in senior corporate strategy roles before joining London Business School’s Strategy Faculty, where he developed a comprehensive method for understanding and managing strategy over time—strategy dynamics—now taught in many business schools. He is the author of Strategic Management Dynamics and Strategy Dynamics Essentials.

Go to online.wpi.edu/+sysdyn to learn more about our faculty and their research.
Advance Your Education and Career Anywhere

Our online Master of Science and Graduate Certificate in System Dynamics enable you to expand your knowledge while building your professional portfolio. Our virtual classrooms offer the benefits of an on-campus experience without traveling to WPI. Interactive communication and learning are achieved through various aspects of our virtual classrooms:

+ Discussion boards
+ Group collaboration and file sharing
+ Web conferencing and virtual meeting space
+ Always-accessible course materials
+ Video lectures and tutorials

Through these components, WPI has been able to successfully offer system dynamics courses to over 400 students from a variety of locations around the world, including:

+ Argentina
+ Australia
+ Belgium
+ Brazil
+ Canada
+ France
+ Germany
+ India
+ Ireland
+ Korea
+ New Zealand
+ Pakistan
+ Spain
+ Switzerland
+ United Kingdom
+ United States

Students are able to continue their careers through online learning, and contribute to the success of their organizations, which include:

+ Argonne National Laboratory
+ Atlantic Lottery
+ Basell USA
+ Booz Allen Hamilton
+ The Dow Chemical Company
+ General Mills
+ Hong Kong Electric Co. Ltd.
+ ISEE Systems
+ Los Alamos National Laboratory
+ Memorial Sloan-Kettering Cancer Center
+ NASA Langley Research Center
+ Norfolk Naval Shipyard
+ Northwestern Mutual
+ Pacific Northwest National Laboratory
+ Raytheon Company
+ Sensor Technologies
+ Sun Microsystems Inc.
+ U.S. Department of Economics
+ Vertex Inc.
+ Xerox Corporation

+ Argentina
+ Australia
+ Belgium
+ Brazil
+ Canada
+ France
+ Germany
+ India

+ Ireland
+ Korea
+ New Zealand
+ Pakistan
+ Spain
+ Switzerland
+ United Kingdom
+ United States
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