

Proven Methods for Project Planning, Scheduling and Control

Managing Project Risk

Project Managers as Agents of Change and Innovation

# **Georgia Tech** College of Management **Project Management Leadership Program** Eight Day Certificate Program: October 8-11 and November 12-15, 2007

Understanding Yourself & Others: The Competing Values Framework

Critical Path Methodology and Managing Expectations

Leading and Managing Virtual Teams

Defining Project Scope, Process Mapping and Business Analysis

Negotiation Strategies and Influencing Skills

The Project Management Simulator Program participants plan, execute and control a simulated 30-week project from start to finish



# EXECUTIVE SUMMARY

Thank you for your interest in Georgia Tech's eight-day **Project Management Leadership Program.** This document provides details on the program content, professor profiles, and the registration process.

The Georgia Tech College of Management, recently ranked in the Top 25 Business Schools in the country by *US News and World Report*, offers an innovative project management leadership training program that helps managers increase their project management knowledge and improve the leadership skills that significantly improve project planning, innovation and success. The program is taught by Georgia Tech's top professors in the areas of operations management, leadership, organizational behavior, and cost accounting. The program content includes:

#### Module One: Monday through Thursday, October 8-11, 2007

- Day One: Project Management Overview, Project Planning, and Scope Definition
- Day Two: Project Scheduling Methods, Managing Risk, Common Reasons Projects Fail
- Day Three: PM Discipline and Analysis, Project Cost Management, Balanced Scorecard
- Day Four: Leading Project Teams, Negotiation Skills, Conflict Resolution, Influencing Others

#### Module Two: Monday through Thursday, November 12-15, 2007

- Day Five: Intersection of Leadership, Project Management, and Change Management
- Day Six: Project Management Simulator: Scope Definition and Staffing Decisions
- Day Seven: Project Management Simulator: Managing Uncertainties, Resource Allocation
- Day Eight: Project Management Simulator: Final Results and Program Wrap-up

The GT professors are master teachers who can translate their research and consulting experiences into practical management tools. Teaching methodologies include:

- Structured multi-media presentations
- Small group discussions and reports
- Timely case studies and PM articles
- An innovative project management simulator

#### There are four easy ways to register for this workshop:

- 1. Call 404.894.8700 or 1.800.815.7662
- 2. Register online at www.execinfo.org
- 3. Send an email to laura.day@mgt.gatech.edu
- 4. Complete the registration form on page six and fax it to Georgia Tech at 404.894.5603



Georgia Tech's Huang Executive Education Center offers state-of-the-art executive education classrooms at the Technology Square campus in Midtown Atlanta. You can take a virtual tour at www.execinfo.org.

### Day One: PM Overview—Focus on Project Planning & Scope Definition

8:30-Noon

#### **Project Management Overview and Introduction to Project Planning** *Professor Vinod Singhal, Georgia Tech College of Management*



The morning session provides an overview of the Project Management Leadership Program and introduces the best practices for managing projects. The objectives of the session are to: (1) Define the components of an effective project management system; (2) Discuss the key leadership elements of project management—as determined in phase one of this proposal; (3) Develop a shared understanding of project management definitions and terminology; (4) Review the pre-program homework assignments including the popular *Project Management Manual* developed by the Harvard Business School; and (5) Explore the best practices in

defining a work breakdown structure that improves the effectiveness of project planning, control and execution. <u>Break</u>: 10:00-10:15

Noon-1:00 PM Lunch and Checking with the Office: Georgia Tech Hotel Executive Dining Room

#### Project Planning and the Importance of Scope Definition

Professor Stelios Kavadias, Georgia Tech College of Management



The afternoon session provides an overview of the quantitative tools for planning and controlling projects, and explores proven methods for defining project scope and dealing with uncertainty. The objectives of the session are to: (1) Learn key project planning and control approaches; (2) Explore the importance of process mapping, network diagrams, Gantt charts and the Critical Path Method; (3) Discuss best practices for implementing time/cost trade-offs; (4) Learn methods for dealing with activity-time uncertainty including simulation techniques; and (5) Understand the managerial challenges when implementing PM methodologies and tools. This session

also includes the small group exercise/case study titled The Gadget Toy Company which allows the participants to try out their new CPM knowledge and skills. <u>Break</u>: 2:15-2:30

**Team Activity** 

1:00-3:30 PM

#### **Project Management Case Study**

Program participants meet in small teams to develop recommended solutions for the critical issues identified in a timely PM case study. <u>Break</u>: 3:30-3:45

3:45-4:30 PM **Project Planning and the Importance of Scope Definition** (Continued)

## Day Two: PM Scheduling, Managing Risk and Why Projects Fail

8:30-Noon

#### **Project Planning Continued plus Scheduling Methodologies and Managing Risk** *Professor Stelios Kavadias, Georgia Tech College of Management*



The morning session continues the discussions on the quantitative tools for planning and controlling projects with an expanded emphasis on proven tools for managing risk and dealing with uncertainty. The objectives of the session are to: (1) Learn the tools available for assessing the risk associated with project scheduling; (2) Introduce a simulation tool that allows participants to develop a deeper understanding of the importance of managing uncertainty and risk; (3) Examine issues related to allocating limited resources to specific project activities; (4) Learn how to effectively implement resource loading, allocation and leveling techniques; and (5)

Understand best practices in how to develop rules to allocate scarce resources to projects and specific project activities. <u>Break</u>: 10:00-10:15

Noon-1:00 PM

Lunch and Checking with the Office: Georgia Tech Hotel Executive Dining Room

#### 1:00-3:30 PM

#### The Common Reasons Why Projects Fail

Professor Saby Mitra, Georgia Tech College of Management



The afternoon session will be customized based on the in-class discussions during day one and a pre-program survey completed by the participants. Professor Mitra will lead innovative and focused discussions on answering the question: "Why do projects fail?" The objectives of the session are to: (1) Learn the tools available to ensure that projects are managed to prevent failure; (2) Discuss why the root causes of project failures have not changed over the years; (3) Explore the seven myths of project management; (4) Understand methods for aligning projects with corporate strategies, organizational goals, and human capital strengths; and (5) Utilize financial

metrics, internal metrics, and customer metrics to tell the whole story regarding project success or failure. <u>Break</u>: 2:15-2:30

**Team Activity** 

#### **Project Management Case Study**

Program participants meet in small teams to develop recommended solutions for the critical issues identified in a timely PM case study. <u>Break</u>: 3:30-3:45

3:45-4:30 PM The Common Reasons Why Projects Fail (Continued)

### Day Three: PM Discipline, Postmortem Analysis, and Balanced Scorecard

8:30-Noon

#### **Project Management Discipline and Learning from Postmortem Analysis** *Professor Saby Mitra, Georgia Tech College of Management*



The morning session is based on the results from extensive industry research on PM best practices in addition to the HBR article titled *Bringing Discipline to Project Management*. The objectives of the morning session are to: (1) Explain why PM experts believe that the "theory of constraints" is the primary determinant of project success or failure; (2) Discuss the key elements of the theory of constraints as it relates to your company's environment and culture—as determined in phase one of this proposal; (3) Develop a shared understanding of why most managers tend to pay little attention to the needs of a project as a whole—instead they manage a project with a series of

dysfunctional negotiations; and (4) Understanding the importance of using postmortem analysis to improve PM processes. <u>Break</u>: 10:00-10:15

Noon-1:00 PM Lunch and Checking with the Office: Georgia Tech Hotel Executive Dining Room

#### Project Cost Management and the Balanced Scorecard

Professor Deborah Turner, Georgia Tech College of Management



The afternoon session provides an overview of the best practices in project cost management and an introduction of the Balanced Scorecard methodology and its impact on project success. The objectives of the session are to: (1) Understand the basic cost behaviors and how they affect project management; (2) Appreciate differential information that activity-based costing can provide in project management; (3) Examine time-tested cost management tools used in budgeting and decision-making; (4) Discuss the practical cost management issues project managers face in a complex environment; and (5) Discover the advantages of using the Balanced

Scorecard methodology to improve project performance. This session includes a focused discussion of the article *Why Does Business Need a Balanced Scorecard?* <u>Break</u>: 2:15-2:30

**Team Activity** 

1:00-3:30 PM

#### **Project Management Case Study**

Program participants meet in small teams to develop recommended solutions for the critical issues identified in a timely PM case study. <u>Break</u>: 3:30-3:45

3:45-4:30 PM **Project Cost Accounting and the Balanced Scorecard** (Continued)

### Day Four: Managing Teams, Influencing Skills and Conflict Resolution

8:30-Noon

#### Managing High-Performance Project Teams

Professor Dennis Nagao, Georgia Tech College of Management



The morning session will focus on proven techniques for designing highperformance project teams and understanding the importance of managing versus nurturing. Program participants will learn first hand that project and team success depend on both technical and social skills. The objectives of the session are to: (1) Learn time-tested methods for aligning individuals, teams and organizations; (2) Discuss why teams are popular with some and considered overrated by others; (3) Explore methodologies for defining team assets and liabilities; (4) Utilize practical tools for improving team processes and productivity; and (5) Recognize and effectively manage team diversity

using the Parker Team Player Styles framework. Break: 10:00-10:15

Team Activity **Carter Racing Exercise:** Participants break into teams and are given assignments that will challenge their new team skills.

Noon-1:00 PM Lunch and Checking with the Office: Georgia Tech Hotel Executive Dining Room

1:00-3:30 PM Improving Your Negotiation, Influencing and Conflict Resolution Skills Professor Christine Shalley, Georgia Tech College of Management



The afternoon session will focus on proven methods for improving influencing skills which are a core PM competency. Effective influencers get valued resources and gain people's trust when managing projects. The objectives are to: (1) Understand that how information is presented is often as important as the content of the message; (2) Understand the best strategies for dealing with difficult people; (3) Learn the principles of influence that are universal across cultures; (4) Answer the six questions that are critical to effectively influencing others, especially when you do not have direct authority; and (5) Proven methods for establishing credibility through expertise. Break: 2:15-2:30

**Team Activity** 

#### PM Conflict Resolution Case Study

Program participants meet in small teams to develop recommended solutions for the critical issues identified in a timely PM case study. <u>Break</u>: 3:30-3:45

3:45-4:30 PM Improving Your Negotiation, Influencing and Conflict Resolution Skills (Continued)

### Day Five: PM Leadership, Change Management and Key HR Issues

8:30-Noon

#### The Intersection of Leadership and Project Management

Professor David Herold, Georgia Tech College of Management



The morning session focuses on understanding the good, the bad, and the ugly aspects of leading a project. Professor Herold will facilitate innovative discussions on effective leadership techniques and how leadership can be shaped, learned, nurtured, and coached. The objectives are to: (1) Learn the difference between managing and leading and understand why both are important; (2) Define the relationship between leadership styles and project management; (3) Answer the question—What do we mean by leadership in your company's environment and culture?; and (4) Explore and better understand the project manager's role in managing the chaos in your organization. <u>Breaks</u>: 10:00-10:15

Noon-1:00 PM Lunch and Checking with the Office: Georgia Tech Hotel Executive Dining Room

1:00-3:30 PM

#### The Intersection of Project Management and Change Management

*Professor Luis Martins, Georgia Tech College of Management* The afternoon session focuses on proven techniques to create positive change in the organization and the importance of understanding the relationship between project management



and change management. Participants will develop an in-depth understanding of the various roles in leading and managing change. The objectives are to: (1) Learn how to assess individual and organizational readiness for change; (2) Understand the intersection of leadership and change management; (3) Explore practical ways to overcome resistance to change; (4) Develop versatility in change leadership styles and behaviors; (5) Learn new methods for implementing change when the change is not your idea; and (6) Improve your ability to assess the political landscape for change and how to become a change agent when planning and executing your project. <u>Break</u>: 2:15-2:30

Team Activity

#### Change Management Case Study

Program participants meet in small teams to develop recommended solutions for the critical issues identified in a timely change management case study. <u>Break</u>: 3:30-3:45

3:45-4:30 PM The Intersection of Project Management and Change Management (Continued)

### Days Six, Seven and Eight: The Project Management Simulator

The last three days of the Project Management Leadership Program involve a time-tested project management simulator that requires the program participants to use their new project management knowledge and skills. The simulator reinforces the instruction provided in program days one through five, and allows participants to test their skills in a realistic but risk-free environment. The participant teams will be responsible for planning, executing, and controlling a simulated 30-week project from start to finish.

The Georgia Tech professors involved in the program, in partnership with J.J. Glatt and Associates, will ensure that the program participants have the essential PM knowledge to take on this three-day intensive Project Management Simulator. Below is a partial list of the decisions that the teams will be responsible for when planning, executing and controlling the simulated project.

#### Staffing Requirement Decisions

- **Staff Acquisition:** Any corporate employee who has a valid "available to move" form on file or contractor listed in the staffing pool description can be procured to the project team, unless there is a temporary head count freeze.
- Selecting Contractors: Select and procure personnel from either the We-Can-Do-It Contractors Incorporated or Make-Life-Easy Company.
- **Borrowing Staff:** Project teams may request any corporate employee listed in the simulation who is listed on the on-loan pool.
- **Training:** Teams can send any corporate employee or contractor personnel to one-week training courses in skills relevant to the project.
- **Termination/Layoff:** Project teams may terminate any corporate employee from the project team with adequate justification. Teams may also layoff contractor personnel at will.

#### Resource Allocation Decisions

- Assignment to Activities: Teams are responsible for assigning all on-board personnel to specific activities identifying the hours per week each individual has to work on each of the assigned activities.
- Authorizing/Cancelling Overtime: Teams can assign any individual on their project team to work overtime for 10 or 20 hour blocks per week. Reducing or cancelling overtime orders is the team's responsibility.
- Setting Computer Priority: Teams must select the computer time priorities. High priority will give you an immediate turn around time; medium priority involves a four-hour turn around time; and low priority involves an overnight response.

At the end of the three-day Project Management Simulator, each team will present their project results to the rest of the class.



# FACULTY PROFILES



#### David Herold, Ph.D.

David Herold is Professor Emeritus of Organizational Behavior. He has published widely in the major psychology and management journals, contributed to books and presented numerous papers at professional meetings. His research interests include: behavioral problems in implementing new technologies, performance feedback in organizations, group performance, leadership and various aspects of workplace problems such as stress, alcohol, and drugs. Dr. Herold is active as a management consultant, helping companies address a wide range of organizational and human resources issues. His areas of specialization include Executive Development, Organizational Design, Human Resources Systems, Leadership, and Managing Organizational Change. He earned his Ph.D. from Yale University.



#### Stylianos Kavadias, Ph.D.

Stylianos (Stelios) Kavadias is an Assistant Professor of Operations Management at the Georgia Tech College of Management. He is a popular instructor in the subjects of project management, performance measurements, and resource allocation in the project management and R&D processes. Dr. Kavadias' research has been awarded second prize in the George B. Dantzig Best Dissertation Competition organized by the INFORMS organization. He has presented his work at conferences all across the world. Stelios earned his Ph.D. in Management from INSEAD (France).



#### Luis Martins, Ph.D.

Professor Luis Martins is Area Coordinator of Organizational Behavior. He conducts research and consults on the role of managerial and group cognitive factors in performance, innovation, and change. His research has appeared in several top management journals and has been covered in major newspapers such as the *New York Times* and the *Chicago Tribune*. His teaching interests include innovation management, change management, leadership, and organizational behavior. He has won several teaching awards at the undergraduate, MBA, and Executive MBA levels; and has taught in executive development programs for GE, NASA, and the FBI Crime Labs. Luis earned his Ph.D. in Management from the Stern School of Business at New York University.



# FACULTY PROFILES



#### Saby Mitra, Ph.D.

Associate Professor Sabyasachi Mitra's current areas of interest include the economic impact of information technology (IT), justifying investments in IT, outsourcing IT activities, IT in the financial industry, and business data communications. Since arriving at Georgia Tech, he has developed courses in data communications and database and information systems development. Dr. Mitra's research has appeared in journals such as *IEEE Transactions on Knowledge and Data Engineering, Decision Support Systems, Journal of Management Information Systems*, and *Telecommunication Systems Journal*. Professor Mitra is a popular executive education instructor in the areas of project management, technology trends and innovations, and the management of technology.



#### Dennis Nagao, Ph.D.

Dennis Nagao is an Associate Professor of Organizational Behavior in the Georgia Tech College of Management. He is also the Faculty Director of the College's Executive Master of Science in the Management of Technology program. Professor Nagao's research interests include team performance and effectiveness, behavioral factors affecting change acceptance and implementation, behavioral decision theory, and mediated group performance. His research and articles have appeared in the *Journal of Applied Psychology, Organizational Behavior and Human Decision Processes, Journal of Personality*, and *Social Psychology* among others. Professor Nagao received his PhD from the University of Illinois at Urbana-Champaign.



#### Christina Shalley, Ph.D.

Christina Shalley is a Professor of Organizational Behavior and Human Resource Management in the Georgia Tech College of Management. She received both her Ph.D. in Business Administration and her M.A. in Labor and Industrial Relations from the University of Illinois at Urbana-Champaign. Chris teaches courses in Negotiation and Conflict Resolution, Research Methods, and Human Resource Management. She has won several teaching awards including Outstanding Undergraduate Teacher at the University of Arizona and Business Teacher of the Year at the University of Arizona. Chris teaches executive education programs in the areas of negotiation strategies and skills, conflict resolution, and influencing others.



# FACULTY PROFILES



#### Vinod Singhal, Ph.D.

Associate Professor Vinod Singhal is Area Coordinator of Operations Management for the Business School at Georgia Tech. Before coming to Georgia Tech, he worked for three years as a Senior Research Scientist at General Motors Research Labs. His teaching interests include manufacturing strategy, measuring manufacturing performance, and activity-based costing. His research interests include justification of new technologies, measuring the financial impact of manufacturing strategies, total quality management, and the design of activity-based cost systems. Professor Singhal earned his MBA from the Indian Institute of Management and his Ph.D. from the University of Rochester.



#### Deborah Turner, Ph.D.

Associate Professor Deborah Turner is professionally qualified as a Certified Public Accountant (CPA) in Georgia and spent four years as an accountant with PricewaterhouseCoopers before joining the Business School at Georgia Tech as an Assistant Professor in 1985. Her teaching interests include financial reporting, managerial accounting, and federal taxation. She is affiliated with the American Institute of Certified Public Accountants, American Accounting Association, American Woman's Society of Certified Public Accountants, and the Financial Executives Institute. Dr. Turner has twice received AWSCPA's award for outstanding contributions to the accounting literature. Professor Turner earned her Ph.D. from Georgia State University.



#### Daniel Stotz, MS in Management (Staff)

Dan Stotz is the Director of Executive Programs for the Business School at Georgia Tech. He is responsible for developing public and custom executive education programs that meet the executive development needs of major corporations. Dan will play the lead role in designing and coordinating each custom program. His major executive education clients include GE Energy, GE Healthcare, NASA, WEG Electric Motors, EarthLink, and Waffle House. In addition to founding an innovative Leadership Institute that provides training for non-profit executives, Dan is a popular speaker in the areas of email marketing and customer relationship management (CRM). Before joining Georgia Tech, Dan was the Manager of Marketing Communications for the University of Michigan Executive Education Center. He earned his Master of Science in Management from Colorado State University.

# **REGISTRATION FORM**

The **Project Management Leadership Program** is an eight-day certificate program offered in two four-day modules scheduled for Monday through Thursday, October 8-11, 2007 (Module One) and Monday through Thursday, November 12-15, 2007 (Module Two). The program will be held at the Georgia Tech College of Management located in Midtown Atlanta, 800 West Peachtree Street NW.

The certificate program price is \$6,500 per person and includes Georgia Tech instructional fees, program binders and materials, case studies, book and simulation licensing fees (when applicable), lunch at the Georgia Tech Hotel executive dining room, morning and afternoon refreshments, parking, and Internet access. **Discounts are available to companies that send three or more employees to the same program.** Call Laura Day at 404.894.8700 for more details.

Note: Special discounts are available for Georgia Tech employees and alumni.

OPTION 1 YES, register me for the Project Management Leadership Program and send an invoice. I will complete this form and fax it to Georgia Tech at 404.894.5603.

Contact Name		Organization		
Street Address		_City	State	Zip
Position		_Division/Dept		
Phone	_Fax	_Email		

**OPTION 2 YES,** I am interested in attending the Project Management Leadership program. Please call me at \_\_\_\_\_\_\_\_ so I can provide credit card information.

**OPTION 3 YES,** I am interested and will go to the Georgia Tech College of Management's web site <u>www.execinfo.org</u> to register online.

**For more information**: If you have questions regarding program content or if you're interested in learning about available discounts, please contact Laura Day at 404.894.8700 or <u>laura.day@mgt.gatech.edu.</u> Program offerings, content, dates, and prices are subject to change.