For more information about the Katz PhD Program at the University of Pittsburgh:
Phone +1 (412) 648-1524
Email: katzphd@katz.pitt.edu
Or visit http://www.katz.pitt.edu and click on the PhD link.

University of Pittsburgh, Katz School of Business
Business Analytics and Operations PhD Program

Thanks for your interest in our PhD program in Business Analytics and Operations (BAO)! This information sheet will provide you with a brief view of the advantages of studying BAO at the Katz School, University of Pittsburgh. For more information, please call us at +1(412) 648-1524, email us at katzphd@katz.pitt.edu, or visit our website at http://www.katz.pitt.edu and click on the PhD link. Click on “areas of study” on the left and choose “Business Analytics and Operations.”

Placements: We are a leading program with respect to placement. Over the last decade, all students who actively sought university positions obtained them, and our recent alumni were placed as faculty members at major universities in the US and Canada, and in research positions in industry.

External Funding: Our program currently receives over $900,000 per year in funding for work in healthcare analytics, and has very close ties with the Veterans Engineering Resource Center (VERC). Some of our projects with the VERC also involve the Heinz and Tepper Schools at Carnegie-Mellon University, and the Pitt Industrial Engineering Department.

The Center for Supply Chain Management: The Center for Supply Chain Management was recently established from seed funding from Herb Shear, former executive chairman of Genco. The Center seeks to bring together faculty, students and industry professionals to support research, teaching and outreach. Through the Center, students get opportunities to interact with industry.

Our Focus on Mentorship:
We are a small, highly selective program, and work closely with our students to make sure that those who join our program complete it successfully and are placed appropriately. The faculty members who currently work with PhD students are:

G.G. Hegde (PhD, University of Rochester). In his analytical and empirical research, G.G. Hegde has studied manufacturing issues from a systems perspective, where design engineering, production control, accounting, and market field constitute a production system. He has emphasized bridging theory with practice in research and in teaching.

Jerrold H. May (PhD, Yale University), Jerry has authored or co-authored over 75 refereed publications in management science, information systems, and artificial intelligence, more than 50 of those with former or current doctoral students. He has chaired 39 doctoral dissertation committees, and co-chaired or directed four others. Most of Jerry’s recent work focuses on data mining and healthcare analytics. For the last five years he has worked closely with the Pittsburgh Veterans Engineering Resource Center and with the VA Office of Business Analytics on systems engineering and redesign initiatives to improve the quality and efficiency of healthcare services to Veterans. You can see a video of Jerry discussing his work with a current doctoral research assistant at http://www.business.pitt.edu/katz/phd/academics/operations.php.

Prakash Mirchandani (PhD, MIT) is the Ben L. Fryrear Faculty Fellow and Professor of Business Administration at the Joseph M. Katz Graduate School. Mirchandani has published in leading academic journals in the Management Science and Operations Management fields, including Management Science, Operations Research, and numerous others. He was Area Editor, Telecommunications and E-Commerce, of the INFORMS Journal on Computing (he was also briefly the Editor-in-Chief of the journal), and has served on the editorial boards of Manufacturing and Service Operations Management. His research interests include network design models for the transportation and telecommunication industries, polyhedral combinatorics and heuristic optimization for integer programming, and the impact of commonality and revenue management on supply chain effectiveness. He is a recipient of the 2013 Katz Excellence in Research Award.

Thomas L. Saaty (PhD, Yale University) University Professor. He is a member of the National Academy of Engineering and serves on the Board of Advisors to Decision Lens, a company based on the Analytic Hierarchy Process (AHP). He is the
architect of the decision theory, the Analytic Hierarchy Process (AHP) and its generalization to complex decisions with dependence and feedback, the Analytic Network Process (ANP). He has published numerous articles and more than 12 books on the AHP/ANP and decision making and the workings of the brain. His non-scientific book on the AHP, Decision Making for Leaders, has been translated to more than 10 languages. His work on group decision making currently is widely used to facilitate decision making in organizations and is being applied to the negotiation of conflicts.

Jennifer Shang (PhD, University of Texas – Austin), Professor and Area Director. Her current research emphasizes three areas: (1) The design, planning, scheduling, and control of operational systems in manufacturing and service organizations (2) Design and evaluation of integrated information/operational and healthcare systems (3) Multi-criteria decision making. Dr. Shang has published more than 60 articles in top Operations and Supply Chain Management area journals as well as in other leading journals across business disciplines. Her article in Information Systems Research Journal won the best ISR published paper award in 2011.

Pandu R. Tadikamalla (PhD, University of Iowa), Professor. He teaches courses in Decision Models, Statistical Techniques for Management, and Simulation. His research interests lie in simulation methodology, statistical techniques in operations management and Marketing. Dr. Tadikamalla received his M.S. and Ph.D. in Industrial and Management Engineering from the University of Iowa. Dr. Tadikamalla has published over 50 research articles in several professional journals.

Luis G. Vargas (PhD, University of Seville; PhD, University of Pennsylvania) Professor. He received his B.S. in mathematics and M.S. Operations Research from the University of Granada, Spain, and his Ph.D. in Mathematics from the University of Seville, Spain. His research focuses on decision theory, practical applications of the Analytic Hierarchy Process (AHP), artificial intelligence in manufacturing, the use of artificial intelligence techniques for scheduling, measurement of resource utilization, group decision making, Bayesian networks, and forecasting. He has published more than 70 papers in refereed journals and has co-authored five books with Professor Thomas Saaty.

Richard E. Wendell (PhD, Northwestern University) Professor. His research includes more than 50 papers on the theory and applications of decision technologies and many have appeared in leading academic journals including Management Science, Operations Research, Mathematics of Operations Research, Mathematical Programming and Interfaces. In particular, he has published extensively in the areas of sensitivity analysis, facility location, multiple objective optimization, and project management, and his research has been supported by several grants from the National Science Foundation.

Flexibility
Kate offers a breadth of research topics – many students can find a home here. Recent PhD dissertation topics have included: Revenue Maximization Using Product Bundling; Business Analytics for Non-profit Marketing and Online Advertising; The Analytic Network Process Applied in Supply Chain Decisions, in Ethics, and in World Peace; Modeling Patient Flow in a Network of Intensive Care Units (ICUs) Managing Outsourcing Decisions – Government Policy, Firm Options, and the Economic Impact: Applications of Revenue Management in Healthcare.

Examples
Our collaboration frequently results in articles that are published in top journals. Some recent examples over the last several years include the following. Note: In bold are our PhD students.


Harris, Shannon L. and Jerrold H. May, “Patient No-Show Behavior and Its Influence on Outpatient Clinic Appointment Scheduling,” Proceedings of the INFORMS Data Mining and Health Informatics Workshop, Minneapolis, September 2013.


Shang, Jennifer, Yildirim, Pinar, Tadikamalla, Pandu, Mittal, V., and Brown, L. Distribution Network Redesign for Competitiveness” Journal of Marketing. 73(2), 2009, pp.146-163.

