In today’s competitive business world, profitability can hinge on collaboration. When a business contacts the Center for Excellence in Business Analytics at IPFW’s Doermer School of Business to help solve a complex problem, everyone wins. Businesses gain revenue-boosting solutions they can afford. Faculty applies their knowledge in the real world. The next generation of problem-solvers gets valuable hands-on experience.

What is the Center for Excellence in Business Analytics?
The Center for Excellence is a consulting arm of the Doermer School of Business. Combining research excellence, cutting edge analytical methods with deep business experience, faculty and students work alongside northeast Indiana manufacturing, financial/banking, insurance, healthcare, technology and nonprofit industries to improve function for increased profit. For example, how does a healthcare facility schedule its medical staff and surgical space most economically? How does a grocery store figure out product quantity, when to stock what and how to best use its staff resources? All of these are complex questions to which the science of business analytics can supply reliable answers that impact the bottom line.

It’s no surprise that Dr. Cigdem Gurgur was chosen to lead this center. Her resume and worldly experiences reflect today’s global business economy. She received her PhD in Industrial and Systems Engineering from Rutgers University and holds an MS in Management Science and Operation Research from Warwick Business School in England and an MS in Applied and Mathematical Statistics from Rutgers University.

Gurgur arrived in Fort Wayne in 2009 after teaching in the Division of Economics and Business at Colorado School of Mines, where she was also the recipient of the Excellence in Teaching and Outstanding Faculty Awards. “It looks a little different here,” Gurgur says, smiling. “More golfing now versus hiking.”

HELPING MINE
THE PROFITABLE POWER OF DATA

The Center for Excellence in Business Analytics uses expert faculty, students and supercomputer resources to boost business success.
Though trained as an engineer, Gurgur’s research has been in the interface of finance, operations and risk management with expertise in both predictive and prescriptive modeling. She teaches supply chain analysis, revenue and pricing analytics and has been a consultant with Lockheed Martin as well as several energy, insurance and manufacturing companies. Her current interest is in the healthcare industry due to Fort Wayne’s strong hospital networks and the bio-technical industry located close by in Warsaw. Related to her research in healthcare supply chain, she was recently an invited speaker at the Institute for Operations Research and the Management Sciences Data Mining and Health-Informatics Conference. She was also invited to present at the Healthcare Systems Research Conference of the International Federation of Operational Research Societies in Barcelona, Spain.

In addition to leading the development of the Center, Gurgur directs the MBA program. “Business Analytics has a lot to offer today’s businesses,” says Gurgur. Often this happens through the capacity of Business Analytics to use growing volumes of data in a way that brings actionable knowledge. “With supercomputers today, we have tons of data, but the question is how to use the data to improve performance,” says Gurgur. “Are we using the right technique to mine the data most efficiently and effectively?”

And because problems encountered in the industry are often expansive, the Center’s multi-disciplinary collaboration is a plus. “The Center for Excellence is an umbrella or gateway,” says Gurgur. “As businesses come to us with a problem, we reach out to our other faculty.” Faculty expertise covers math, computer science and business. “The interdisciplinary approach helps to discern the right questions to ask and what to do with the data,” says Gurgur. “The goal is maximizing of profits through finding quick solutions. The result is enhanced business performance.”

**A Win for Fort Wayne**

The Center for Excellence in Business Analytics is all about how to use the growing volume of data to enhance business performance in northeast Indiana. The Fort Wayne community is the winner; businesses grow more successful, a future workforce gains valuable experience and a thriving university system keeps on giving.