



It's not just game-changing. It's globe-changing.





BUSINESS + ENGINEERING + LEADERSHIP

Today's global business climate is nothing like it was ten years ago.

The thinking shouldn't be either.

The world of business has changed. New ways of thinking and new leaders are needed. It's why the Tauber Institute for Global Operations at the University of Michigan was created. Today's leaders must manage the larger scope of operations, from the plant floor to the boardroom. This kind of leader doesn't just happen. The Tauber Institute develops and delivers superior talent utilizing the strengths of Michigan's top-ranked business and engineering schools overlaid with a comprehensive leadership development program.

Combined with strong support and input from industry, the Tauber Institute for Global Operations has become one of the premier multidisciplinary operations programs in the world.

You're invited to put the power of Tauber Institute thinking to work for your business as a sponsoring company.

To find out more, call 734.647.1333 or visit www.Tauber.umich.edu





TEAM PROJECTS:

Where the world's top minds meet the world's top industries.

Tauber Institute students represent the top talent in the world. The nation's top industries have noticed. The Tauber Institute for Global Operations unites top students and industries in a 14-week multidisciplinary, collaborative project.

THE RESULT?

MILLIONS EARNED AND SAVED

Students work on substantive issues to earn or save sponsoring companies millions of dollars from the team project results.

RETURN ON INVESTMENT – HIGH-IMPACT PROJECT RESULTS

Team Projects are highly visible operations-related challenges with both engineering and business components. A successful project results in a significant return on a sponsoring company's investment. The projects have historically delivered significant financial savings as well as improvements in areas such as CO2 emissions, energy consumption, throughput time, and supply chain risk.

EARLY RECRUITING OPPORTUNITIES

Team Projects give your company early access to the world's most promising recruits. Sponsoring companies are given the chance to present their project proposals and to provide an overview of their company to exceptionally qualified students. Once a student team has been assembled, Team Projects allow for a highly effective evaluation and recruiting environment.

The Tauber Institute also provides numerous opportunities to network with the entire pool of Tauber Institute students. Sponsoring companies gain access to a group of highly talented candidates who are focused on operations-related careers. Many Tauber Institute graduates accept jobs with project sponsors or other companies affiliated with the Institute.

TAUBER TEAM PROJECT RESULTS MAKING A WORLD OF DIFFERENCE

BORGWARNER INC.

Formulated best practice methodologies for optimizing future packaging, handling and shipping processes. Expected savings in excess of \$1 million annually through purchase part cost reductions.

How Team Projects work

Projects range from high-level strategic analyses to complex supply chain redesigns to detailed plant layout and work flow issues for a specific product line. The Tauber Institute directors assist sponsors in scoping a project to maximize ROI. Specific project deliverables are agreed upon in advance by the sponsoring company and the Tauber Institute. Examples include:

- + Machine learning and advanced analytics
- + Lean process design and implementation
- + Business unit manufacturing plan
- + Manufacturing site strategic assessment
- + Supply chain implementation plan
- + Strategic capacity analysis
- + New product/process development strategy
- + Product complexity analysis
- + Managing transitions between products
- + Manufacturing process design

TEAM PROJECT CONSTITUENTS

TAUBER STUDENTS who represent the top talent in the world are admitted by the College of Engineering and the Stephen M. Ross School of Business. The majority bring with them significant experience in fields such as product engineering, manufacturing or consulting. Most Tauber Institute students have undergraduate training in engineering or other technical fields. They have made a substantial commitment to careers in operations or manufacturing and pursue an education specifically designed to meet the needs of today's firms. Tauber Institute graduate students are enrolled in one of the following programs:

- + Master of Business Administration (MBA)
- + Engineering Global Leadership Honors Program (combined BSE and MSE degrees in engineering)
- + Engineering Graduate Program (Master's degree in any engineering discipline)

UNIVERSITY OF MICHIGAN AWARD-WINNING FACULTY from both the College of Engineering and the Stephen M. Ross School of Business work closely with students on each project. Each project is assigned a faculty advisor from each school who are committed to a specific project, consult regularly with the team, and make on-site visits to review progress. Students are given resources and trained to become a cohesive team. This is done through the usage of team and communication coaches who meet with the students to identify potential strengths and weaknesses in the group's styles. Strategies are then developed to maximize a team's effectiveness. Thus, students arrive at the project site as a cohesive team prepared to focus solely on the project.

COMPANY REPRESENTATIVES include a project supervisor who maintains close contact with students, a project champion from senior management and a human resources representative to facilitate summer, and possible future employment.

WHERE AND WHEN THE PROJECTS TAKE PLACE

Student teams work at the sponsor's site for the duration of the project. The sponsor provides necessary computer and office equipment and security access. The project takes place 14-weeks from May through August.

TAUBER TEAM
PROJECT RESULTS
MAKING A WORLD OF DIFFERENCE

DOW CHEMICAL CO.

Streamlined and automated the international container shipment process by developing a database that optimized container and carrier selection decreasing shipping cost by \$10.9 million annually.



HOW THE TEAMS PREPARE

Aside from their graduate studies concentrations, students in the Tauber Institute are trained in a variety of operations management topics; the required course **Topics in Global Operations** addresses areas such as supply chain management, new product design, the use of e-business tools throughout the corporate value chain, and sustainability. Multiple workshops provide hands-on experience in topics such as value stream mapping, Six Sigma, and advanced analytics. Another required course is **Manufacturing and Supply Operations** which covers basic and advanced concepts in techniques of operations and inventory management ("Factory Physics") and provides a framework for evaluating and improving operations.

Graduate level elective courses in both business and engineering offer the students an unmatched array of classes in operations management and related areas. This cross learning environment helps to improve overall project performance.

The LeadershipAdvantageSM Program is the most comprehensive team leadership model among peer universities. Designed to increase workplace performance, specialized modules develop leaders through professional skills assessment, team dynamics and coaching, as well as lectures that include leveraging effective business relationships, communication skills, project management, cultural awareness and decision making. Unlike other programs, the LeadershipAdvantageSM Program actively engages students in a series of interactive, skill-building exercises and explores strategies for initiating change, selling new ideas, overcoming disagreements and building consensus.

Leadership experience is a prevailing strength of the Tauber Institute's **LeadershipAdvantage**SM **Program**. Students lead and participate on committees for the Global Operations
Conference, Student Advisory Board, Leadership Speakers Series, and Facility Tours.

Spotlight!

TEAM PROJECT SHOWCASE SCHOLARSHIP COMPETITION

Upon project completion, all teams return to the University of Michigan to compete in the annual *Spotlight!* scholarship event held in mid-September. Each team presents their project results to corporate representatives, students, alumni and faculty. Judges from top firms evaluate projects on the basis of scope, implementation, impact and overall presentation skills.

Drawing extensive attention from industry, this event showcases innovative operations solutions that can potentially save corporations millions of dollars. *Spotlight!* offers an excellent opportunity to establish relationships with students, expand a corporation's university presence and gain exposure to many new ideas in operations.

TAUBER TEAM PROJECT RESULTS MAKING A WORLD OF DIFFERENCE

SPOTLIGHT!

In 2017, the student teams worked on 32 projects from 21 companies, averaged \$18.5 million/per project savings over 3 years. **The total savings projected was \$575 million.**

PROJECT PARTICIPATION FEES

SPONSOR FEE: Please contact Associate Director Asli Aka at akah@umich.edu for the per project fee, which covers the cost of project administration, faculty involvement, coaching resources, and team leadership training.

PROJECT EXPENSES: The sponsoring company pays for student expenses associated with the initial project team meeting (e.g., travel and lodging). This meeting is conducted with students and faculty advisors at the project site during March or April.

It is generally expected that student relocation expenses are the responsibility of the sponsoring company. Housing allowances are permitted and recommended, especially in areas with high costs of living.

STUDENT SALARIES: The sponsoring company hires Tauber Institute students as employees. The following are the recommended weekly student salaries. (Companies may choose to offer salaries less than the proposed ranges based on internal company guidelines and/or which reflect market factors in a particular area. If a company chooses to compensate less or more than the salary range, the company must discuss the proposed salary range with the Tauber Institute at the time of project submission and prior to the interview process.)

WEEKLY STUDENT SALARY RANGES:

\$1600 to \$1775: Graduate students with four or more years of full-time work experience

\$1350 to \$1500: Graduate students with more than two but less than four years of full-time work experience

\$1100 to \$1200: Graduate students with less than two years of full-time work experience, including EGL students entering their fifth year of study

PROPOSAL DEADLINE: DECEMBER 1

Put the power of Tauber Institute thinking to work for your business. Become a sponsor.

To find out more, call 734.647.1333 or visit www.Tauber.umich.edu

TAUBER TEAM
PROJECT RESULTS
MAKING A WORLD OF DIFFERENCE

WW GRAINGER INC

Developed strategy to change current product label requirements and assessed its possible impact on the entire value chain, identifying potential **initial** savings of \$3 million and annual savings of \$12 million.



CALENDAR

OCTOBER - NOVEMBER

Potential sponsors identify a corporate champion and submit initial project ideas to the Tauber Institute via an online Team Project Application.

NOVEMBER - DECEMBER

Potential sponsors discuss project proposals with Tauber Institute representatives. Last day to submit proposals: December 1

JANUARY

Potential sponsors review Tauber Institute student resumes and present project proposals to students on campus.

FEBRUARY

Potential sponsors conduct student interviews on campus. Both students and sponsoring company rate one another based on these interviews.

MARCH

The Tauber Institute matches project sponsors with student teams using a model based on mutually expressed preferences. Faculty advisors are assigned by the Tauber Institute.

MARCH - APRIL

Student teams and faculty advisors meet at sponsoring company sites to complete initial project planning.

MAY - AUGUST

On-site: student teams resolve operations and manufacturing issues for sponsoring companies.

MID-SEPTEMBER

Spotlight! Sponsoring company representatives, faculty advisors, and students meet at the University of Michigan for team project presentations. Top-performing teams are awarded scholarships.

INDUSTRY ADVISORY BOARD

3M Company Amazon.com American Industrial Partners American Securities LLC Arconic A.T. Kearnev The Boeing Company BorgWarner Cardinal Health Chagrin Consulting Services Cisco Systems ConAgra Foods Dell, Inc. The Dow Chemical Company DTE Energy Company Ford Motor Company General Motors Company **HERE Technologies** Infosys Limited Mayo Clinic McKinsey & Company Microsoft Corporation National Center for Manufacturing Sciences Pacific Gas & Electric Pfizer, Inc. **Precision Castparts** Steelcase **Tauber Enterprises** Tesla. Inc. Whirlpool Corporation

TAUBER TEAM PROJECT RESULTS MAKING A WORLD OF DIFFERENCE

WHIRLPOOL

Created holistic marketing strategy for first large-scale direct-to-consumer business venture: an e-commerce outlet store with **\$40 million** potential.

PROJECT SPONSORS

NORTH AMERICA

3M Company

Advanced Micro Devices

Alcatel-Lucent

Alcoa

Amazon.com

American Industrial Partners

Ametek AM General Amway Aramex A.T. Kearney

BASF

Bayer

The Boeing Company

Boral Limited BorgWarner Cabot Corporation Cardinal Health Caraill

Carrier Corporation

Caterpillar

Chrysler Group LLC

Cisco Systems Colfax Corporation ConAgra Foods Cooper Industries Copeland Corporation Cordis Corporation Cribmaster

Deere & Company

Dell. Inc

Cummins

Delphi Automotive Dexter Research Center

Diageo

The Dow Chemical Company

DTE Energy Company Eastman Kodak Company Eaton Corporation Eli Lilly and Company Emerson Electric Company

Exide Technologies Federal-Mogul Corporation Flextronics International

FMC Corporation Ford Motor Company Fresenius Medical Care

GE Aviation GE Healthcare

General Electric

General Cable Corporation

General Mills, Inc. General Motors Company General Signal Corporation

Graham Partners Guardian Industries **Guidant Corporation** Hallmark Cards

Harley-Davidson Motor Company

Herman Miller

Hewlett-Packard Company Honeywell International Intel Corporation ITT Corporation Jabil Circuit Johnson & Johnson Johnson Controls

Knoll Kostal Leybold, AG Lockheed Martin

Lutron Electronics Company Mac Arthur Corporation Masco Corporation McKinsey & Company

Medtronic Merck & Co. Merito

Microsoft Corporation

National Center for Manufacturing

Sciences, NCMS National Grid Navistar OfficeMax

Pacific Gas & Electric Company

Pall Corporation PepsiCo . Pfizer, Inc. **Precision Castparts** Raytheon Company

Revlon Ryder Systems Schlumberger

Seattle Children's Hospital

Siemens SPX Corporation SRG Global

Stanley Black & Decker

Steelcase

Sunbeam Products Sunset Produce Target Corporation

Teva Pharmaceutical Industries TRW Automotive Holdings United Technologies Corporation

University of Michigan

UPS Venchurs Verizon

Volkswagen Group of America Westinghouse Electric Corporation

Whirlpool Corporation

Woodward W.W. Grainger Xerox Corporation Youth for Understanding

INTERNATIONAL

Alcoa (Australia, Japan)

Aramex (Jordan)

BorgWarner (Brazil, China, England, Germany, Hungary, Italy, Portugal,

Slovenia, Spain) Cisco Systems (Malaysia) Dell (Ireland) Delphi Automotive

(France, England) Ford Motor Company (Brazil, United Kingdom) General Motors Company (China, Germany)

Great Giant Pineapple Company

(Indonesia)

Honeywell International (China)

Indo Keramik (Indonesia)

Kostal (Mexico)

Leybold, AG (France, Germany) National Label (Indonesia) Pall Corporation (Puerto Rico)

Schlumberger (China) Sepatu Mas Idaman (Indonesia)

Sewu Segar Nusantara (Indonesia)





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