

Overview for Graduate Engineers

Interested in becoming a leader in today's highly competitive world of Operations?

The Tauber Institute is a joint venture between the University of Michigan's Stephen M. Ross School of Business and the College of Engineering, and many industry partners to facilitate cross-disciplinary education in global operations management. It was founded in 1993 to meet industry's need for a new kind of graduate—one who has an exceptional academic background, extensive professional experience, and most importantly, can successfully integrate business and engineering perspectives to lead global operations into the future.



Front row L to R: Elizabeth Ettleson (EGL BSE & MSE-IOE '18) and Peter Rasmussen (MBA '18). Back row L to R: William Chen (MBA & MSE-IOE '18) and James Holden (MBA '18)



Academics/Courses

Topics in Global Operations begins with an overview of operations in the context of corporate strategy. This is followed by a series of modules dealing with various topics of importance in operations, such as lean production systems, supply chain management, design for manufacturability, facilities planning, the environmental, legal, and ethical issues in operations, and product design. Students learn how all these aspects of operations interconnect and how they may apply to Tauber team projects.

Manufacturing and Supply Operations

introduces the basic concepts and techniques of operations and inventory management. The foundation of the course is a system of manufacturing laws collectively known as "Factory Physics."



Professional Skills/Leadership AdvantageSM Program

A series of modules teaching students useful techniques to stand out among their competition in the workplace after degree completion. In conjunction with the Tauber curriculum, students are exposed to important operations topics such as Six Sigma and Value Stream Mapping as well as social and professional skills such as public speaking, team dynamics, project management, and personal interviewing skill development.



Industry Experience/Team Project

The capstone to the Tauber Institute, this action-based, guaranteed 14-week consulting-like project gives a team of engineering and business students the opportunity to deliver high impact results to an industry-leading company.

Facility tours scheduled throughout the academic year provide insight into operations and Lean manufacturing.

2017 Tauber Institute Employment Statistics August 2016–April 2017 Graduates

INDUSTRY	BASE SALARY				BONUS	
	%	Avg.	Median	Range	%	Median
Engineer 32 of 36 responding						
Consulting	19%	\$76,000	\$77,500	\$69,000–\$82,000	100%	\$5,000
Manufacturing	31%	\$84,400	\$80,500	\$69,000–\$115,000	60%	\$3,500
Services	50%	\$96,719	\$92,500	\$65,000–\$123,000	81%	\$16,500



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Frequently Asked Questions



L to R: Mae Zyjewski (Senior Director, Advanced Manufacturing), Ignacio Estrada Garcia (MSE-ME/Masters of Management), Joel Tauber, Audrey Hettig (Assembly System Lead Engineer), Larry Seiford (Tauber Engineering Co-Director), Ryan Colameo (MBA), Dawn White (Engineering Advisor), Damian Beil (Tauber Business Co-Director), and Ray Muscat (Tauber Industry Director).
Photographer: P. Dattilo

Q: What value can the Tauber Institute bring to an engineering student? What are the benefits of obtaining a graduate engineering degree with the Tauber overlay?

A: Through the Tauber Institute, you will obtain a guaranteed, paid team project. You will also receive extensive leadership and team work training through the LeadershipAdvantageSM Program, and you will have access to both engineering and business school career resources.

Q: What graduate engineering degree programs enable me to be a part of the Tauber Institute?

A: The Tauber Institute is open to graduate engineers in any program who are interested in operations. It is highly recommended that all graduate engineers have to at least two years of full-time work experience, but multiple substantive internships will be considered.

Q: What if I have no previous business experience? Will this be a problem for the team project?

A: Working as a team with at least one business student, the engineering student brings his/her technical skills to the project complementing their teammates' business knowledge. Through the LeadershipAdvantageSM Program, both business and engineering students learn how to effectively collaborate with teammates from a variety of backgrounds with a robust set of skills and experience.

Q: What types of engineers (disciplines) are suited for the Tauber Institute?

A: Practically any type of engineer who wants to understand the operations area of a business is well-suited for the Tauber Institute. For example, a chemical engineer with skills obtained from the program, can effectively manage the process of drug manufacturer/delivery. A computer engineer familiar with the supply chain can program controllers to run an automated operation. Or a Tauber-educated mechanical engineer can bring a design from prototype to wide-scale production in the most cost-effective manner, resulting in great savings for his/her employer.

Q: At what point in my (engineering) academic career do I complete the Tauber project?

A: Students in a graduate engineering program complete the project over the summer following two semesters of study. For these students, the project becomes the culmination of their U-M and Tauber experience.

Q: In what industries/positions do Tauber engineers work after graduation?

A: Depending on their interest, Tauber engineers take jobs with a variety of companies, consulting firms, and service industries. Positions they accept include Regional Sourcing Manager, Continuous Improvement Manager, Inventory Planner, Consultant, Operations Analyst, and Supplier Development Engineer.

2017 Employers

Amazon
Apple Inc.
Applied Predictive Technologies
Bain & Company
Boeing Company
Boston Consulting Group
Brunswick Corporation
Dell Inc.
Deloitte Consulting
DENSO International
EES Consulting
Emerson Electric
EY
GE Aviation
General Motors
Google
Intel Corporation
McKinsey & Co.
Microsoft Corporation
Navigant Consulting
Northrop Grumman
OhmConnect
Procter & Gamble
PwC-Strategy&
Stanley Black & Decker
Tesla Motors
The Keystone Group
Thornton Tomasetti
TransMarket Group, LLC
W.W. Grainger, Inc.
Whirlpool
Williams International
ZS Associates