

# 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 Stephen M. Ross School of Business, 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.



2021 Spotlight! first place team: Master of Science in Industrial & Operations Engineering students Akshay Seth and Janice (Yin Yin) Lau.



### 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/LeadershipAdvantage<sup>SM</sup> 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.

## 2021 Tauber Institute Placement Statistics August 2020–May 2021 Graduates

INDUSTRY	BASE				SIGNING BONUS	
	Avg.	Median	Min	Max	%	Median
<b>Engineer 11 of 11 responding</b>						
Aerospace	\$96,000	\$96,000	\$96,000	\$96,000	100%	\$5,000
Automotive/Transportation	\$87,500	\$87,500	\$70,000	\$105,000	100%	\$0
Consulting	\$74,000	\$74,000	\$74,000	\$74,000	100%	\$12,000
Healthcare	\$75,000	\$75,000	\$75,000	\$100,000	100%	\$5,000
Tech/Commerce	\$87,647	\$95,440	\$0	\$130,000	83%	\$5,000



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## Frequently Asked Questions



Group photo was taken during Tauber business + engineering student 14-week team project on-site at Boeing.

### 2021 Employers

The Boeing Company  
Western Digital Corporation  
Amazon.com, Inc.  
Pfizer Inc.  
DHL Consulting  
Foxconn  
General Motors Company  
Microsoft Corporation  
Tesla, inc.

#### **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 LeadershipAdvantage<sup>SM</sup> 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 LeadershipAdvantage<sup>SM</sup> 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 VP Global Technology and Operations Development Program, Manufacturing Engineer—Smart Factory, Business Analyst Consultant, Operations Manager, and Senior Consulting Analyst.