

# WELCOME TO ISEN



**NSC** NEW  
STUDENT  
CONFERENCE



TEXAS A&M UNIVERSITY

Wm Michael Barnes '64 Department of  
Industrial & Systems Engineering



---

# Agenda

- About ISEN
- Academic Advising Information
- Degree Plan Overview
- Department Policies
  - Departmental Scholarships
  - 2-Peat Policy
  - Academic Probation
  - Academic Dishonesty
- Other Things to Know





# The Undergraduate Programs Office



**Dr. Amarnath Banerjee**  
Associate Head of  
Undergraduate Affairs



**Emily Kaufman Baumann**  
Assistant Director Undergraduate  
Affairs



**Jeana Goodson**  
Senior Academic Advisor/EAS  
Advising Coordinator



**Alexander Nagy**  
Academic Advisor III



**Miriam Morales**  
Academic Advisor II

**Visit us!**

Schedule an  
appointment on  
Navigate & look  
out for events.





# Industrial Engineering (INEN)

Focuses on design, installation, improvement, and control of integrated systems of people, materials, and facilities.

In short Engineers make things  
Industrial Engineers make things  
better







# #8

UNDERGRADUATE PROGRAM

# #6

GRADUATE PROGRAM

*Among public  
universities*



# More About Our Department

- Department founded in 1939
- **Best** and **largest** IE program in Texas and in a 700-mile radius
- ABET accredited IE Program
- Award winning faculty and staff
- Very active student chapters







## INEN Major Overview

### What IEs do....

- Devise more efficient, safe, and economical systems
- Integrate workers, machines, materials, information, and energy to provide better products and services
- Improve an organization's bottom line (\$\$) to remain competitive

### The systems IEs engineer....

- Aerospace
- Automobile
- Finance
- Manufacturing
- Healthcare
- Entertainment
- Retail
- Sports
- Logistics
- Transportation
- Urban Planning
- **EVERYTHING!**



# Department Areas of Research





# Industrial Engineering Body of Knowledge



**Work Design & Measurement**



**Operations Research & Analysis**



**Engineering Economic Analysis**



**Facilities Engineering & Energy Management**



**Quality & Reliability Engineering**



**Operations Engineering & Management**



**Ergonomics & Human Factors**



**Supply Chain Management**



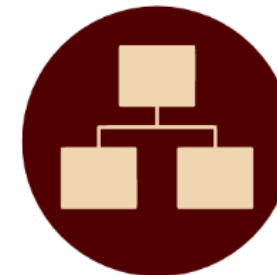
**Safety**



**Information Engineering**



**Design & Manufacturing Engineering**



**System Design & Engineering**



**Product Design & Development**



**Engineering Management**



# Job Titles

## Science/Technology

- **Program Management Engineer**, Texas Instruments
- **Support Engineer**, Microsoft

## Financial/Banking

- **Data Scientist**, Bank of America
- **Business Technology Solution Analyst**, Deloitte

## Government/Defense

- **Industrial Engineer**, Lockheed Martin
- **Operations Research Analyst**, US Air Force

## Manufacturing

- **Continuous Improvement Engineer**, Smith System Manufacturing
- **Die Designer**, Ellwood Texas Forge

## Healthcare

- **Performance Improvement Engineer**, CHRISTUS Health
- **Data Quality Engineer**, UT Health Houston

## Commercial/Supply Chain

- **Supply Chain & Engineering Associate**, Frito-Lay
- **Facilities Operation Manager**, PepsiCo

## Transportation

- **Global Supply Analyst**, Tesla Inc.
- **Human Factors Engineer**, Boeing

## Want More Information?

Check out the Career Center Survey  
Data: [tx.ag/IEcareers](https://tx.ag/IEcareers)





# Who's Hiring

## Science/Technology



## Financial/Banking



## Government/Defense



## Healthcare



## Commercial/Supply Chain



## Manufacturing



## Transportation



and  
**MANY  
MORE!**



# Hiring Prospects

From the Occupational Outlook Handbook:



	<b>United States</b>	<b>Texas</b>
<b>2022 Median Pay</b>	\$96,350 per year \$46.32 per hour	\$103,860 per year \$49.93 per hour
<b>Typical Entry-Level Education</b>	Bachelor's degree	
<b>Work Experience in Related Occupation</b>	None	
<b>On-the-job Training</b>	None	
<b>Number of Jobs, 2022</b>	327,300	
<b>Job Outlook, 2022-32</b>	12 % (much faster than average)	
<b>Employment Change, 2022-32</b>	38,400	

<https://www.bls.gov/ooh/architecture-and-engineering/industrial-engineers.htm>



# Enrichment Opportunities



## Co-Ops

- Must take ISEN 230 first
- Earn academic credit AND real-world experience!



## Internships

- Not required but encouraged
- Real-world experience



## Study Abroad

- Faculty-led in Egypt, Greece, India, etc.
- Reciprocal Exchange: ENSAM



# Enhance Your Degree



## Popular Minors

Business  
Engineering Project  
Management  
Statistics  
Cybersecurity



## Accelerated Programs

3+2 MSF  
3+2 MPH  
ISEN Fast Track



## Research

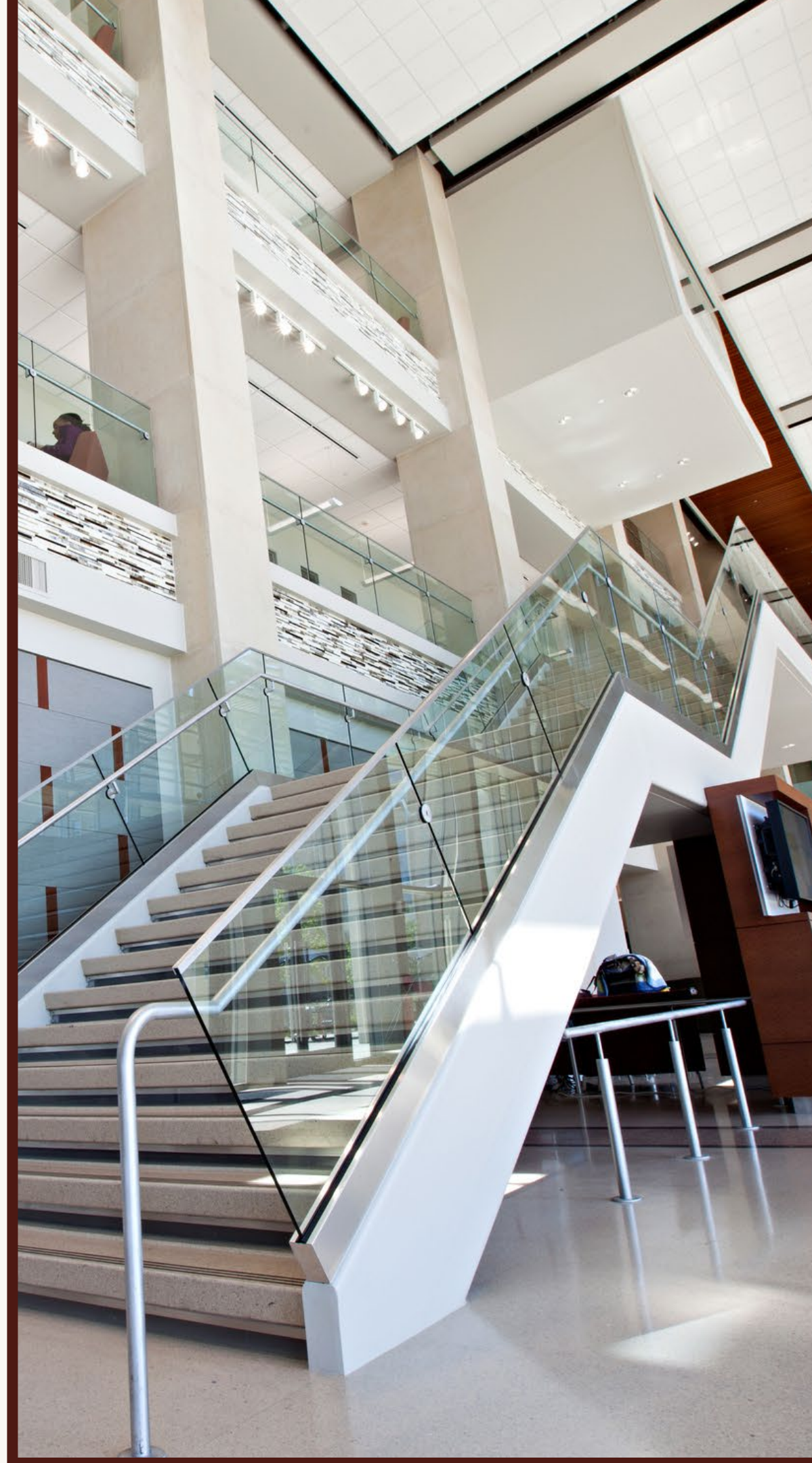
Advanced Manufacturing  
Operations  
Data Science  
Health & Human Systems



---

# Facilities

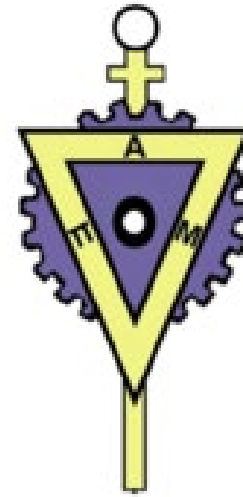
- The Emerging Technologies Building (ETB) is home to ISEN
- ID Controlled Access
  - If issues with access, contact building proctor:
  - Mr. Murat Kaynak, engrfpm-270@tamu.edu
- Some after hours access to ETB 1027 & 2026 for ISEN majors
- Student fridge and microwave: ETB 3rd floor next to 3009
- Remote desktop access: VMware Horizon Client
  - <https://coe-connect.engr.tamu.edu/>
- ISEN IT Helpdesk (open during normal business hours)
  - isen-helpdesk@tamu.edu
  - Room 3019
  - (979) 458-2384





---

# Professional Societies



**TEXAS A&M**  
UNIVERSITY®

**Student Chapter**



# Student Resources





---

# ISEN Writing Center ETB 3030

## Services Offered

- Paper review
- Public Speaking
- Resume Critique
- Networking
- Interview prep



**Jose Vazquez**



**Jon (JP) Elizondo**



# Study Tips and Tricks

1. Go to class!
2. Prepare for, participate in, and review each class
3. Sit up front
4. Build relationships with faculty
5. Beat procrastination
6. Know your mind and body
7. Break up big projects into smaller tasks and schedule backward from due dates
8. Sleep well, eat healthy, and exercise
9. Be purposeful
10. Meet with an academic coach.

[http://asc.tamu.edu/Study-Learning-Handouts-\(1\)/Tips-for-Success](http://asc.tamu.edu/Study-Learning-Handouts-(1)/Tips-for-Success)

Texas A&M's Academic Success Center

## Study Tips

- 1 GET ENOUGH SLEEP**  
  
so that your brain has the opportunity to consolidate new knowledge.
- 2 BREAK STUDY TIME INTO SMALL CHUNKS**  
  
Space your learning over multiple days.
- 3 Know Your Body. Study when you are at your MOST ALERT.**
- 4 TURN HEADINGS INTO QUESTIONS**  
  
and read paragraph by paragraph for comprehension.
- 5 TEST YOURSELF FREQUENTLY**  
when you study, so you can practice retrieving information.

**ATM**



---

# Career Center ISEN Support: ZACH Suite 283



James Dwyer '12 (MBA)  
*Career Coordinator*

[james\\_dwyer@tamu.edu](mailto:james_dwyer@tamu.edu)

Call for appointments or office hours:

979.845.5139

ZACH 283 – ENGR



---

# Counseling & Mental Health Center

Resources are available for you. Let us know how we can help or reach out to:

**STUDENT COUNSELING & MENTAL HEALTH CENTER**

471 Houston St. | 1263 TAMU  
College Station, TX 77843-1263

**STUDENT HEALTH CENTER**

311 Houston St. | 1264 TAMU  
College Station, TX 77843-1264

**UNIVERSITY HEALTH SERVICES CONTACT**

📞 979.458.4584

[uhsinfo@tamu.edu](mailto:uhsinfo@tamu.edu)



Carmen Mota, M.A., LPC-S  
Licensed Professional Counselor-  
Supervisor

ZACH 382E  
M-F 9:00 am- 6:00 pm—by appointment  
Friday 10:00 am- noon—drop-ins



# Departmental Policies





---

# Scholarship Information

- The ISEN department has **45** different scholarships available for undergraduate students!

## How to Apply:

- Fill out the University Scholarship Application: **[uwide.tamu.edu](http://uwide.tamu.edu)**

## When to Apply:

- October 15 through February 1st

## Who Should Apply:

- YOU. Every year!





---

# 2-Peat Policy

All engineering required courses (including ISEN/DAEN major courses) must be completed with a **C or better** within **2 attempts**.

- Q-drops, withdrawals (W), and transfer coursework are all considered attempts.
- No exceptions will be made for course prerequisites.
- Failure to complete a course within 2 attempts may result in your dismissal from ISEN/DAEN.





# Academic Probation



- **You will be placed on academic probation if:**
  - <2.0 GPA in the semester GPA\*
  - <2.0 in-major GPA\*
  - <2.0 cumulative TAMU GPA
- \*Incompletes (I) or missing grades (X) are calculated as equivalent to an F for this calculation.
- **How do I get off probation?**
  - Complete 12 hrs of coursework
  - Obtain a 2.0 semester GPA
  - Complete all degree-required coursework with a C or better
  - Repeat any major or prereq coursework you didn't pass (don't forget the 2-peat policy!)]



---

# Academic Dishonesty

“An aggie does not lie, cheat, or steal or tolerate those who do.”

## Examples of Academic Dishonesty:

- **Multiple Submissions:** Submitting the same assignment for credit in more than one course.
  - Also includes revising a paper, report, or presentation to resubmit in another course.
- **Unauthorized Collaboration:** Assume that all assignments should be completed individually unless the instructor explicitly says otherwise.
- **Fabrication:** Includes altering official documents or providing false information to a faculty member (such as a doctor's note)
- **Complicity:** Knowingly helping or attempting to help another commit academic dishonesty
  - Includes signing in for another student on attendance sheets or completing other's attendance activities
  - Allowing another student to copy from your test, paper, or assignment
  - May include even passive participation in unauthorized groups (e.g. GroupMe, text chains, etc.)



---

# Academic Dishonesty

“An aggie does not lie, cheat, or steal or tolerate those who do.”

## Suggestions to avoid honor code accusations and violations:

- **Read the syllabus!** It will lay out the rules for the course and what types of collaboration are/are not allowed.
- **Ignorance is not an excuse.** This is especially true if you don't read the syllabus....
- **Assume nothing.** If something is not explicitly allowed in the syllabus, ask before acting. Don't take your fellow students' word for it.
- **Don't trust AI. Don't use AI.** Just don't do it.





TEXAS A&M UNIVERSITY

Wm Michael Barnes '64 Department of  
Industrial & Systems Engineering

## Contact us



Emerging Technologies Building



979.845.5531



[ieundergradadvising@tamu.edu](mailto:ieundergradadvising@tamu.edu)

## Follow us



@ISEN.TAMU