

Global HR Forum – Seoul, South Korea – November 2023

# PREPARING STUDENTS TO THRIVE IN A NEW ECONOMY AND SOCIETY THROUGH INTERDISCIPLINARY ENTREPRENEURSHIP EDUCATION

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Purdue University, Indiana USA

# About me

## At Purdue University

- Director, University Entrepreneurship Education Initiatives
- Faculty, Department of Technology Leadership & Innovation

## Nationally

- Co-PI, National Science Foundation Innovation Corps Program
- Co-PI, National Science Foundation National Research Traineeship
- Professional Organization Boards and Leadership



Entrepreneurship  
education and assessment

STEM and  
entrepreneurship

Professional Development

Gender and Leadership

# Purdue University - Facts

- Large state university in the Midwest
- 52,000 students
- 39,000 undergraduate
- 13,000 graduate
- 4,000 faculty
- University System
- Research — \$600M



# 10 Colleges - top ranked programs

- Engineering
- Science
- Technology
- Agriculture
- Education
- Health Sciences
- Liberal Arts
- Management
- Pharmacy
- Veterinary Medicine

Founded in 1869



“Land grant” university focused on being an engine of economic development for the region



# Evolution of interdisciplinary activity at Purdue

## 2005 Discovery Park



- Interdisciplinary research centers (e.g., nanotechnology, biosciences, environment)
- Collaboration space
- Centralized administration

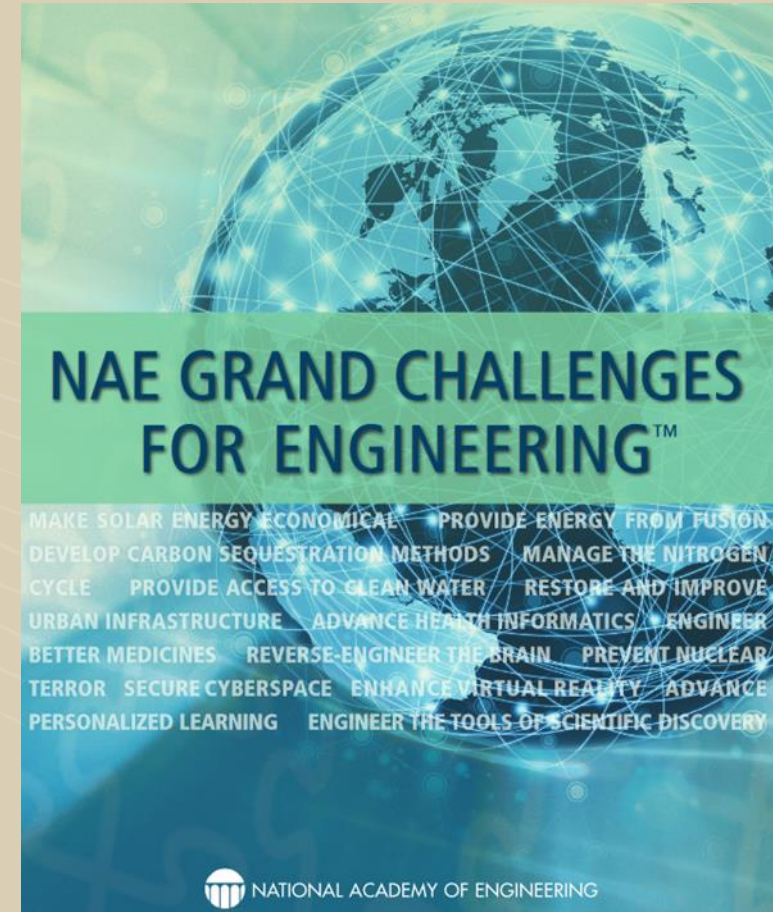
## 2022 Discovery Park District



- Interdisciplinary research centers
- Industry collaboration space
- Co-working space
- Technology commercialization activity
- Apartments, homes, and businesses

# Purdue's Interdisciplinary Mission

- Address society's "grand challenges" through interdisciplinary solutions
- Be more competitive for larger research grants
- Increase collaboration with industry
- Transform university culture through interdisciplinary collaboration
- Prepare undergraduate and graduate students for careers



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# Entrepreneurship Education and Experiential Learning





**LEARN MORE**  
**PURDUE.EDU/ENTR**



**ENTREPRENEURSHIP**  
**FOR ALL MAJORS**

**CERTIFICATE IN ENTREPRENEURSHIP AND INNOVATION**



# Undergraduate Entrepreneurship Program Overview

- Similar to a minor, available to all students
- 50 entrepreneurship courses/year
- 2000 students
- Over 160 majors represented
- Among the largest programs in the country
- Administered centrally through the Office of the Provost



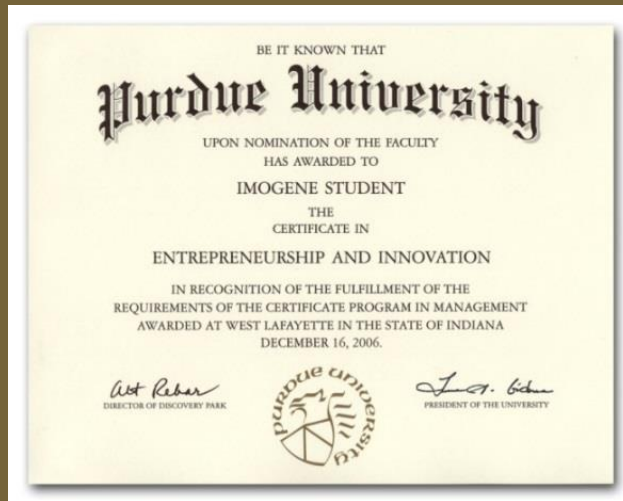
# *Interdisciplinary teamwork in classes*

- Learn to assess new venture opportunities
- Acquire fundamental knowledge and skills related to the launch of new ventures
- Develop leadership and communication skills needed to direct new initiatives
- Enhance job prospects and choices



*Transferable skills for work and life*

# Very Flexible Program Requirements



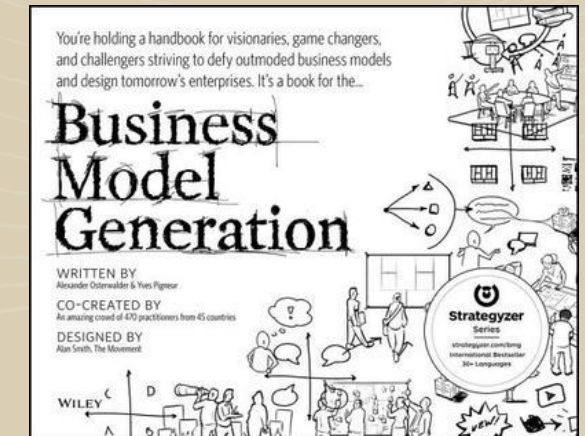
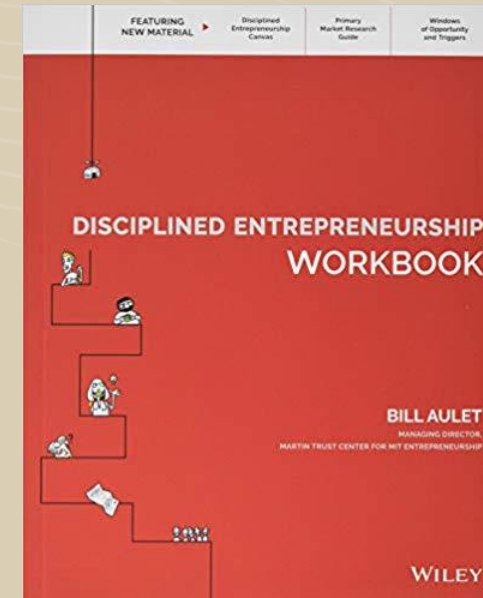
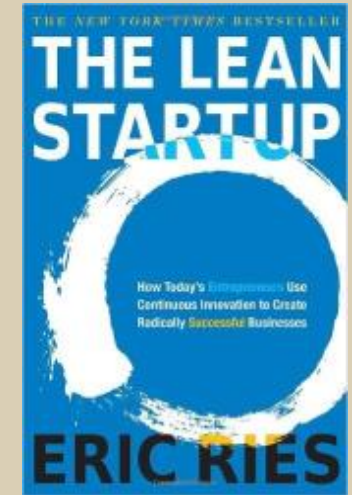
**2 INTRODUCTORY COURSES**  
ENTR 20000 + ENTR 31000 OR ENTR 31500

**3 COURSES & CAPSTONE EXPERIENCES**



# Fundamentals Courses

- Entrepreneurship concepts and definitions
- Market assessment
- Business models
- Business formation
- Sources of funding
- Entrepreneurial finance
- New-venture teams
- Intellectual property protection
- Growing a startup



# 3 Experiential Capstone Courses

Real-world engagement with  
the business community



# 1. Entrepreneurial Leadership and Careers

Learn how to use entrepreneurial talents in a start-up, family business, or established organization.





## 2. Consulting for Emerging Enterprises

Learn to be a consultant

Work on a business development project

- Communicate with clients
- Gather data
- Make recommendations on growth opportunities





utsource

# Transform Your Ideas into Games

THANK YOU.  
April 24, 2023  
talane@purdue.edu



# Other courses - Social Entrepreneurship



**BUSINESS PLANNING  
FOR SOCIAL  
ENTREPRENEURSHIP**

**NEW COURSE SPRING 2018**  
ENTR 31500 | PREREQUISITE: ENTR 20000

**BUSINESS FOR SOCIAL ISSUES**

CERTIFICATE IN ENTREPRENEURSHIP AND INNOVATION





# Internship and Career Preparation

## MODULE 1: ASSESSING YOUR PROFESSIONAL SKILLS ▾



The first module in this course allows you to assess the professional skills you currently have and determine which ones will be most beneficial to you in the future.

- Identify your professional strengths and skills
- Reflect on the skills you need to obtain or improve for your future career
- Create and share your own professional elevator pitch

## MODULE 3: COMMUNICATING YOUR PROFESSIONAL SKILLS ▾



Now it's time to practice clearly communicating your new and improved professional skills to potential employers and future collaborators. In this module, you will:

- Revise your resume after seeking out professional feedback
- Create a more professional-looking LinkedIn profile for networking purposes
- Finalize and submit your e-portfolio project

## Student Feedback

"I feel quite strongly that this course would greatly benefit every student at Purdue as it increases professional presence as well as job preparedness."

# Gender, Diversity and Leadership Course and Events



**WOMEN IN LEADERSHIP**  
**ENTR 47000A – SPRING ONLY**

**Tuesday/Thursday 3:00 - 4:15 p.m.**      **Certificate in Entrepreneurship & Innovation**

This team-taught and highly interactive course is designed to provide a social and historical perspective of women in leadership, as well as the practical skills students can use to develop their own leadership abilities. Students have opportunities to meet with women leaders from a variety of organizations. Topics of social, political, and economic interest are covered, as are discussions of current issues and research relevant to leadership success.

**REGISTER SOON!**  
**SPACE IS LIMITED**

[PURDUE.EDU/ENTR](http://PURDUE.EDU/ENTR)

**150 GIANT LEAPS**  
PURDUE UNIVERSITY

**ALPHA**  
**GIRLS:**  
WOMEN IN STEM, BUSINESS, & ENTREPRENEURSHIP

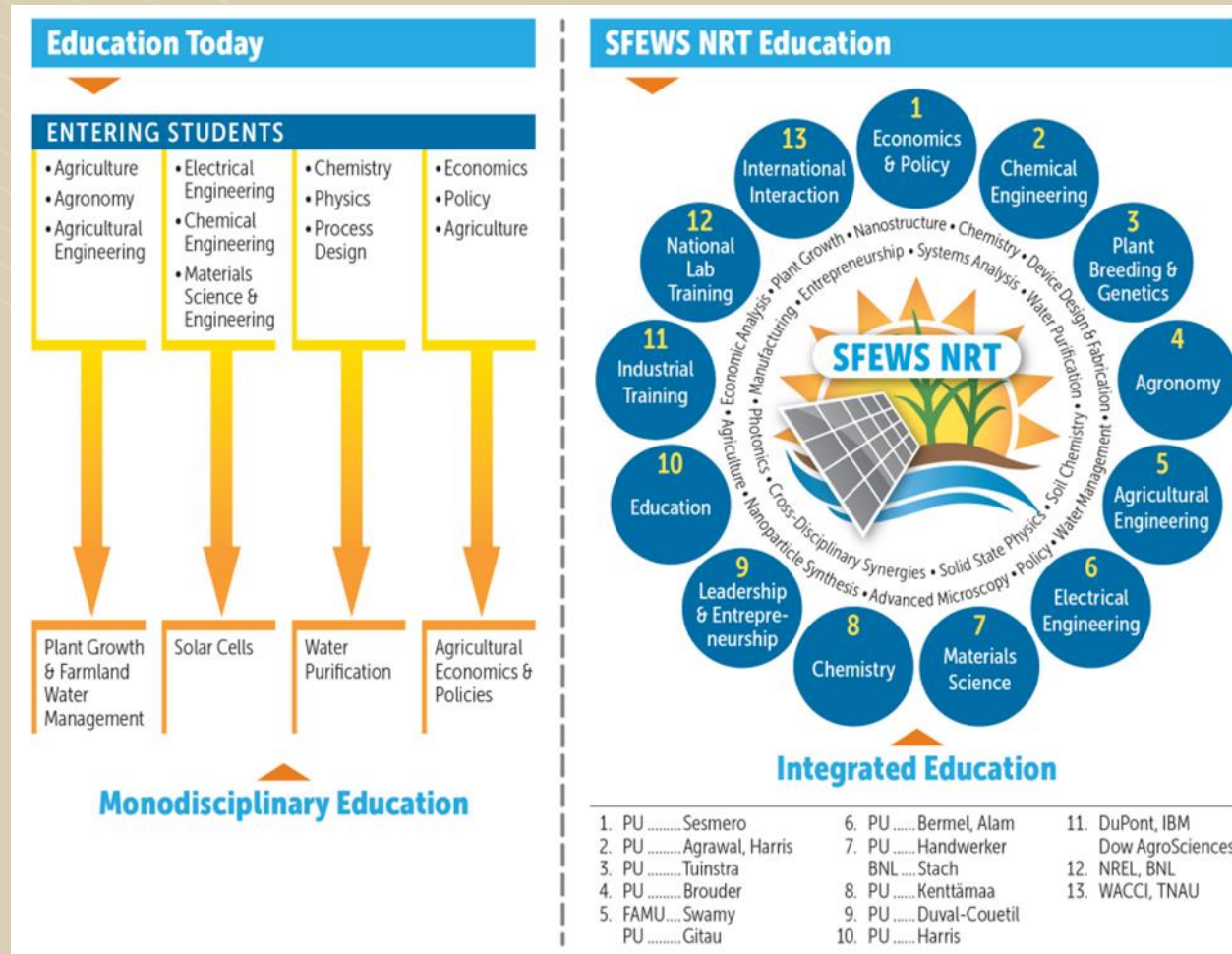


M. J. Elmore    Janice Evans    Chris Hoyoma    Julian Guthrie    Nathalia Ouyal-Covatt

**Thursday, October 10 | 5:30 p.m.**  
**Burton D. Morgan Center | Room 121**  
**Purdue University**  
**Free | Open to the Public**

# Interdisciplinary Graduate Training

Integrated PhD program focused on Sustainable Food, Energy, and Water Systems (SFEWS)



Funded by the National Science Foundation



# Graduate Entrepreneurship Training



**LEARN TO  
TRANSLATE  
RESEARCH INTO  
IMPACT**

**FALL 2023 GRADUATE COURSE**

**Life of a Faculty Entrepreneur:  
Discovery, Development & Translation**

**PURDUE  
UNIVERSITY**

**PREPARE FOR CONTEMPORARY  
JOBS IN INDUSTRY OR ACADEMIA**

Understand how to navigate the intellectual, financial, leadership, and management processes associated with translating research into tangible products that have an impact on society. We will cover topics such as intellectual property, investment, publishing versus patenting, conflicts of interest, personal and professional rewards, and timing.

Rarely is it possible to find a course that can satisfy so many important facets of a subject. It shows you how to transition from an academic mindset to a technology development frame of mind.  
Craig Sweet | PhD Student

I liked the guest lectures from faculty entrepreneurs and discussions about industry collaborations that assisted with commercialization because I may be interested in something along those lines in the future.  
Shalini Jyer | Postdoc

**REGISTER FOR: ABE/TLI 62600**  
Tuesdays • 4-6:40 PM MRGN • Room 121  
Network with peers

**FOR MORE INFORMATION CONTACT:**  
**Mike Ladisch** • Distinguished Professor  
ABE, BME [ladisch@purdue.edu](mailto:ladisch@purdue.edu)  
**Nathalie Duval-Couetil**, Professor TLI  
[natduval@purdue.edu](mailto:natduval@purdue.edu)

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Impact

# Outcomes – Exit Survey Data

- 4 out of 5 students expect to be involved in a startup in the future.
- 96% believe the skills and knowledge will be useful to their future careers.

"I LOVED SITTING IN A MULTIDISCIPLINARY CLASSROOM WITH A DIVERSE GROUP OF STUDENTS."



"I LIKED THE POSITIVITY AND SUPPORT SURROUNDING THE PROCESS OF BECOMING AN ENTREPRENEUR."



"I FEEL LIKE OUT OF ALL OF THE CLASSES I TOOK AT PURDUE, THESE HAD THE MOST USEFUL COURSEWORK."



"THE AMOUNT OF TIME IT FORCED YOU TO SPEAK AND STEP OUT OF MY COMFORT ZONE. AMAZING EXPERIENCE!"





# Aligned with Purdue goals for undergraduate education

## **This program has expanded my interests – thinking bigger**

*Coming into this program, I thought all I want to do was open my own Veterinary clinic and that was it. However, since starting this program I have learned that I can do many more things. I now have interests in owning more than one business. I want to open many under one name that instead of just a single business. **It has opened my mind to thinking bigger.***

## **It has given me more confidence – to achieve goals**

*I think over all the assignments in this program have made me think more about my personal plan for my start-up and how I may alter my strategy for the future. **I think this confidence pushes me further to attempt my goals as opposed to sitting on the side and toiling in my cave planning something I won't attempt.***

## **It has helped A LOT – motivation**

*When I initially started taking ENTR classes I didn't expect for these classes to have as big of an impact as they've had on me. Not only teaching us the how to actually start our own companies **but also teaching us what it takes mentally for us to have the motivation to really want to get out of college and make an idea become reality.***

## **This program has helped me organize my business and plan for the future**

*I have been exposed to new ways of doing things such as structuring and legal aspects as well as funding and employees. I have also been exposed to a few things that I had not every previously considered such as TAM and Beachhead markets. **I have since taken a step back and reevaluated my business and bettered it because of the ENTR program.** I am thankful to the staff and content of this program because they have helped me increase my chances for success in my journey.*

# Program Impact

- Princeton Review Top 50
  - up 31 slots since 2020
- Program Awards
  - Model Entrepreneurship Program Award ( USASBE, 2020)
  - Top 5 Program (GCEC, 2018)
  - Excellence in Curriculum Innovation (Deshpande Foundation - 2017)



# In conclusion...

**Entrepreneurship can be a**

**main gig**

**side hustle**

**mindset**

**Turbocharge your undergraduate  
Purdue degree**

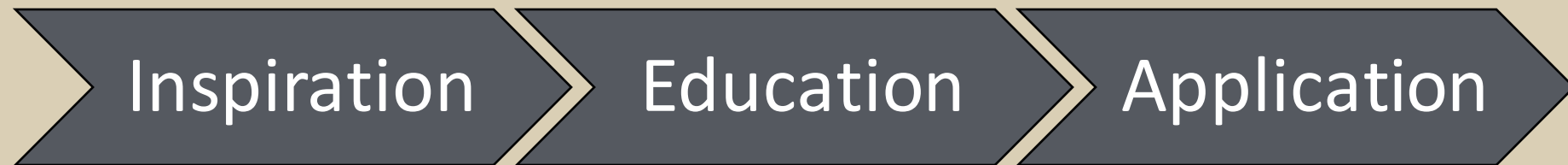
Certificate in Entrepreneurship and Innovation

[www.purdue.edu/entr](http://www.purdue.edu/entr)



# Interdisciplinary entrepreneurship education is...

- An efficient way to learn how to generate economic and social value from knowledge
- Skills and mindset are highly desired by employers and needed in society
- Well suited for experiential learning which is a goal of higher education
- Offers the opportunity for engagement with important community stakeholders



# Thank you! Questions?

Nathalie Duval-Couetil, MBA, PhD

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