

ENGINEERING AT PURDUE IN INDIANAPOLIS

Nik Chawla

Associate Dean for Engineering in Indianapolis

Ransburg Professor of Materials Engineering

Faculty Affairs Committee Meeting

November 6th, 2024



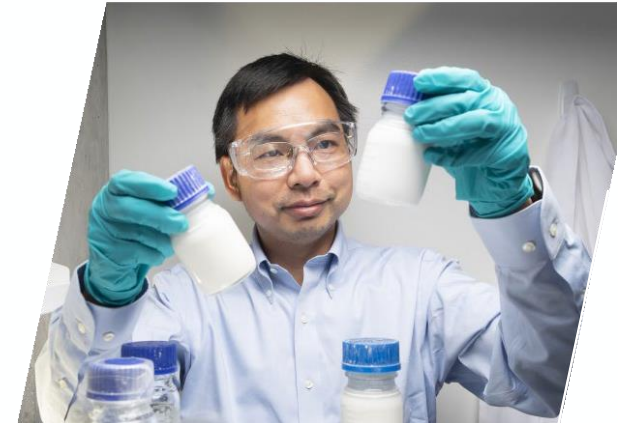
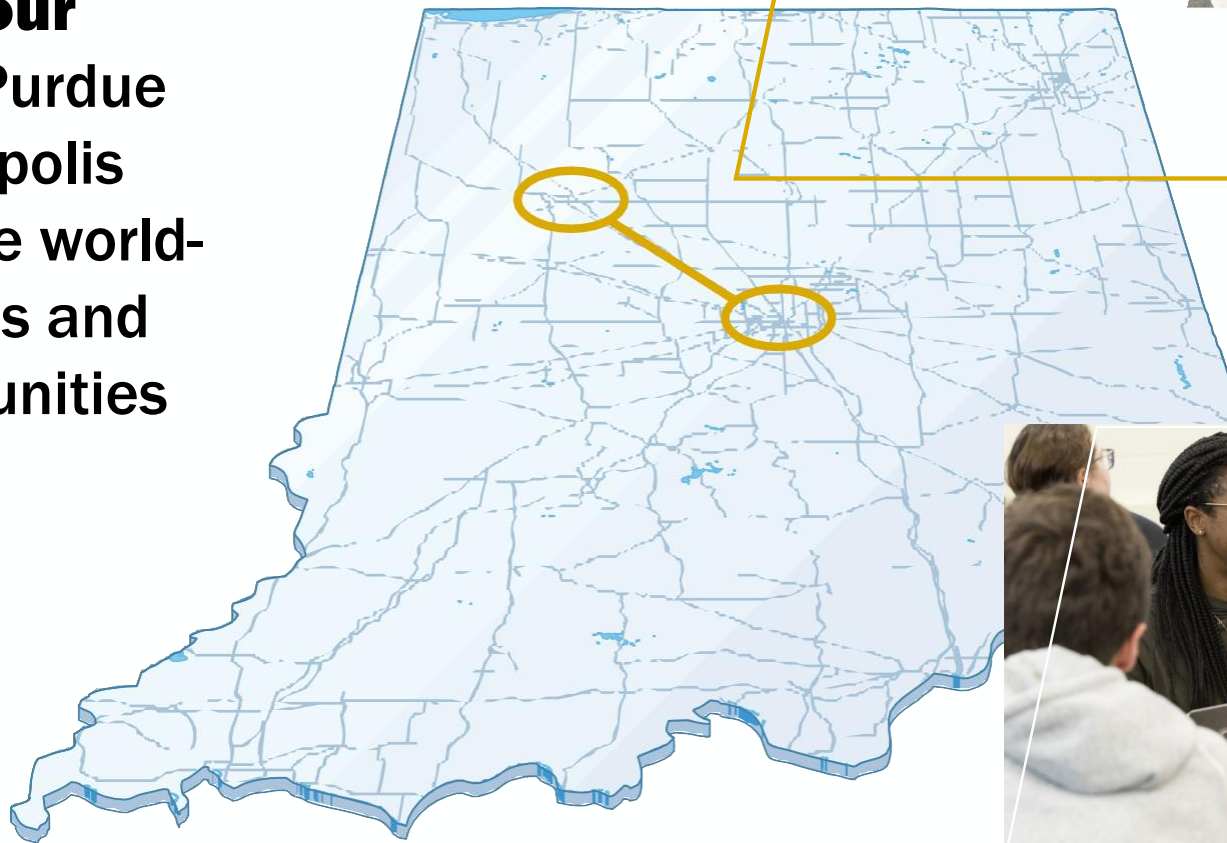
OUR VISION

A new, fully integrated extension of Purdue's flagship campus will bring the academic rigor and accessible excellence the university is known for to central Indiana, fueling growth and accelerating an innovation-based economy for Indianapolis, the state and the nation.

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- *An Extension of West Lafayette*
 - *Truly Urban Heart*
 - *Integrated with Community*
 - *Platform for Experiential Learning*

Bookending the HardTech Corridor

Strategically located just 60 miles south of our flagship campus, Purdue University in Indianapolis will provide the same world-renowned credentials and life-changing opportunities as our campus in West Lafayette.



Core Differentiators

Direct Admission: Purdue University in Indianapolis engineering students are enrolled — day one — in the specific degree- granting major of their choice.

Guaranteed Internships

In-demand undergraduate majors and programs... Stay tuned for expansion!

College of Engineering

- Biomedical Engineering
- Computer Engineering
- Electrical Engineering
- Mechanical Engineering
- Motorsports Engineering

College of Science

- Artificial Intelligence
- Computer Science
- Data Science
- Actuarial Science

Polytechnic Institute

- Animation and Visual Effects
- Computer and Information Technology
- Computer Engineering Technology
- Computer Infrastructure and Network Engineering Technology
- Cybersecurity
- Interior Architecture

Daniels School of Business

- Integrated Business and Engineering

Engineering Programs in Indianapolis

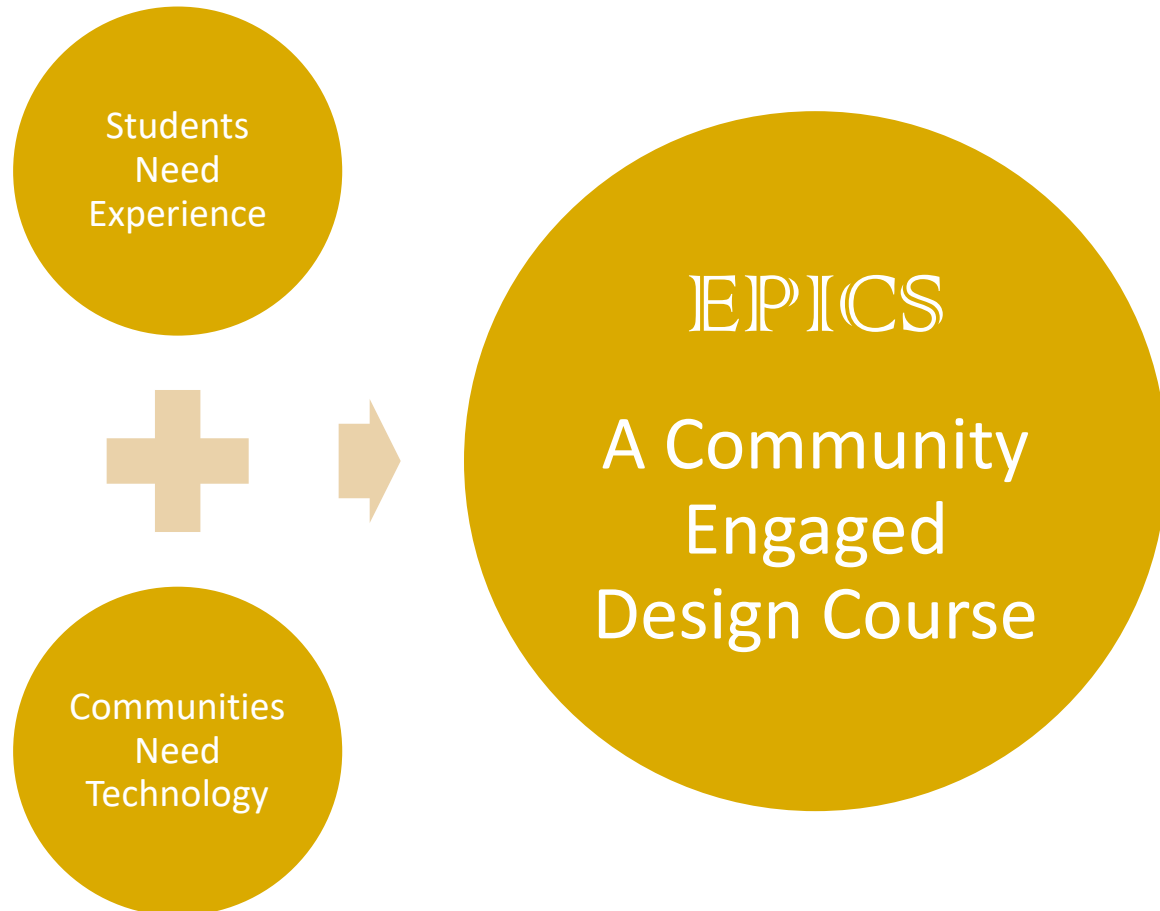
Program	Faculty	Lecturers/ Clinical	Staff	Graduate	Undergraduate
Mechanical (Alan Jones, Site Dir.)	20 (5 TT/15 Courtesy)	7	2	33	911
BME (Joey Wallace, Site Dir.)	8 (2 TT/6 Courtesy)	3	2	30	151
ECE (Brian King, Site Dir.)	15 (5 TT/10 courtesy)	4	2	33	370
Total	43	14	6	93	1432

Highlights for Engineering @ Indy

- Motorsports program is attracting students from all over the world – 110 students in the program
- BME has strong relationships with IU School of Medicine
- Clinical immersion experience as part of the BME undergraduate program – NIH R25: (IN)SCRIBE
 - (IN)SCRIBE is a 7-week paid clinical immersion and team-based design internship for biomedical engineering students.
- Teaching delivery innovation: Two ECE WL campus courses delivered to Indianapolis students *via* simulcast.



Purdue in Indianapolis 1st Year Engineering Experiential Learning



Vertically Integrated Projects (VIP)

VIP TEAMS

- Interdisciplinary
- Vertically-integrated
- Team-based
- Authentic and extended research and design projects

STUDENT BENEFITS

- Enhance design and technical experience
- Enhance professional skills: leadership, teamwork, communication, project management
- Gain experience through authentic and extended projects

First Year Engineering – Transition to Indy (T2i)

Transition to Major (T2M) Process in WL

Enables first-year students to declare their engineering major after completing specific requirements. This includes:

- Enrollment in foundational courses
- A declaration deadline for students to officially select their desired major
- Guidance through advising
- Transition to Indy (T2i)
- Objective: Increase the number of West Lafayette Engineering students coming to Indianapolis.



Key Components of Proposed Transition 2 Indy

Wave 1: Guaranteed Acceptance

- Process: Students meet specific program criteria (e.g., completion of first semester courses with a certain GPA). Students will declare using an online form provided by the College of Engineering.
- T2I requests for this wave will be documented in the registrar's system in January to allow students to access Indy classes for F25 with appropriate priority. In the meantime, students remain in FYE and complete their foundational coursework.
- Deadline: Declarations must be made by November 15 of the fall semester.

Wave 2: Post-First Semester (Based on Eligibility)

- Allow students to transition to Indy in February, also after their first semester grades are available. Eligibility will be determined based on first-semester academic performance and fulfillment of specific program criteria.
 - Process: Handled through a modified T2M process for FYE Students, which assigns these students to Indy-based advisors. *Wave 2 students must declare by February 1 of the spring semester so that students can be advised by Indy-based advisors rather than FYE advisors.*

First Year Engineering – Transition to Indy (T2i)

Advising and Support

- Dedicated advising support will be provided through the College of Engineering and the Indy advising team.
- Regular workshops and counseling sessions will be available to ensure students understand their eligibility, the transition process, and the opportunities available at Indy.

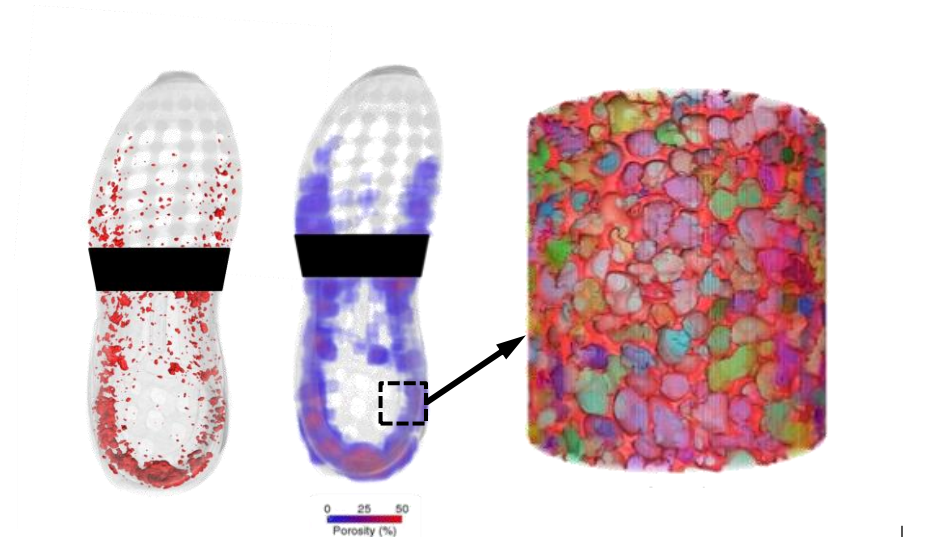
Housing Support

- Purdue Housing will work closely with any student holding a Purdue UR housing contract to facilitate their transition from WL to Indy.



Proposed New Programs in Engineering

- Biotechnology and Bioprocess Engineering Professional Masters Program
- Industrial Engineering (2+2 program)
- Industrial Engineering – Systems Engineering
- Construction Management – Business Program
- Sports Engineering (current, now in Indy only)
- Integrated Business and Engineering



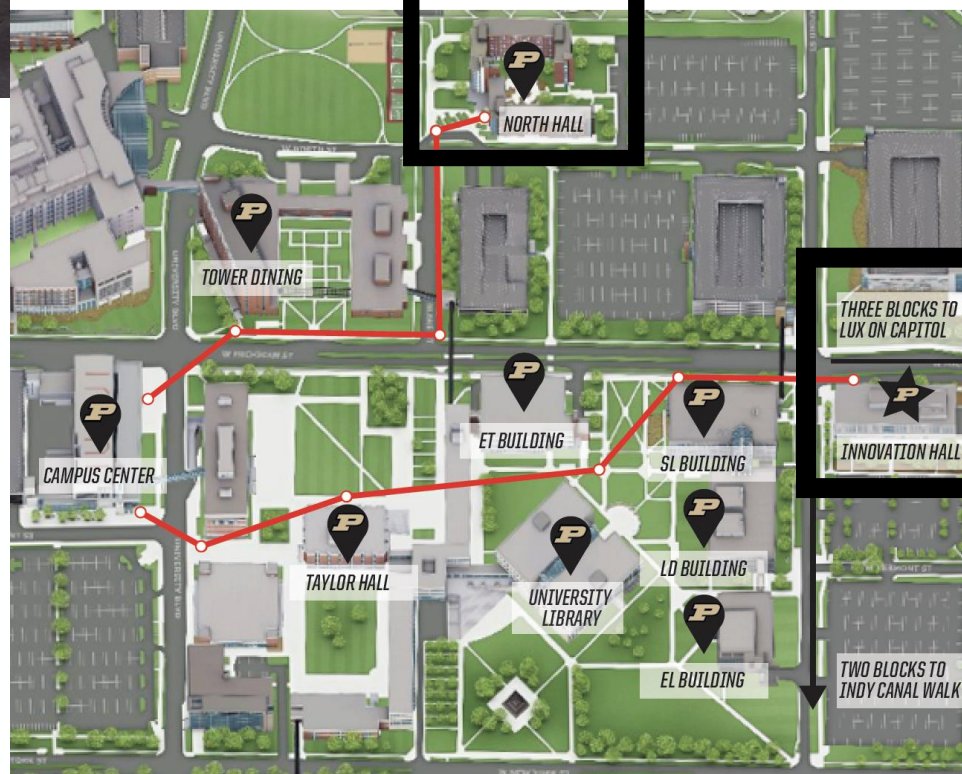
Sports Engineering

Highlights from the Office of Professional Programs (OPP)

- 17 students attended Indy Autonomous Challenge
- ~250 students engaged with ENGR 103: Professional Practice class with OPP, Rolls Royce team and more industry speakers coming this semester (Lilly, IMS, PepsiCo, Elanco)
- 8 new Indy startups for the Interns for Indiana program brought in for Summer 2025 programming
- Indy Co-op Fair – January 27th, 2025 – unique to Indy will welcome Indiana companies



Student Life



- Housing and dining available
 - 450 beds at North Hall
 - 400 beds at Lux on Capitol
- Student activities and organizations
- Unique extracurricular opportunities



Learning Communities

635 students in a Learning Community

- Engineering (415)
- Data Mine (68)
- Honors (48)
- Polytechnic (47)
- Science (57)

Learning Community Events

- Meet the Data Mine (Data Mine)
- Women in Engineering at Fever (Engineering)
- Women in Engineering Ice Cream Social (Engineering)
- Turkey Run w/ Dr. Oakes (Engineering)
- Honors at Fever (Honors)
- Women in Tech Networking (Data Mine)
- Your LC, the Zoo, and You (All LCs)



Student Activities and Organizations

Student Organizations in Indianapolis

Recognized Organizations (14)

- Society of Hispanic Professional Engineers (SHPE)
- Students for the Exploration and Development of Space
- Nanoscience and Engineering Association
- PINSecurity*
- Student Design Organization
- Computer Science Club
- Christian Student Fellowship*
- Autonomous RC Club*
- Endurance Racing Club*
- Men's Volleyball Club*
- Motorsports Engineering Club
- Computer Science Women's Network (CSWN)*
- Purdue Badminton Club*
- Music Club*

Registration in Process (8)

- American Society of Mechanical Engineers
- National Society of Black Engineers
- Society of Women Engineers
- Themed Entertainment Engineering & Design Club
- Women's Go-Kart Team
- Women in Technology
- Robotics Club
- VexU

**New student organizations*

Student Activities and Organizations

Integration with West Lafayette

- Purdue Student Government (PSG)
 - Indy VP
 - 3 senators from Indy
- Purdue Graduate Student Government (PGSG)
 - 1 senator from Indy (*more seats available*)
- Purdue Student Union Board (PSUB)
 - Indy VP
 - Committee Director for Indy
 - 14 committee members
- Residence Hall Association (RHA)
 - Indy President & Treasurer
 - 2 representatives from Indy



Students Participating in Purdue-Google AI Conference

Purdue/Google AI Summit will bring together leaders from industry, government, and education to explore the impacts of AI on learning, work, and workforce development.



Anna Schroeder, BME



AI Summit



Wafaa Kanakri, ECE



Amirreza Tootchi, ME

Acknowledgments



Sherrie Tucker



Patrick Francis



David Umulis