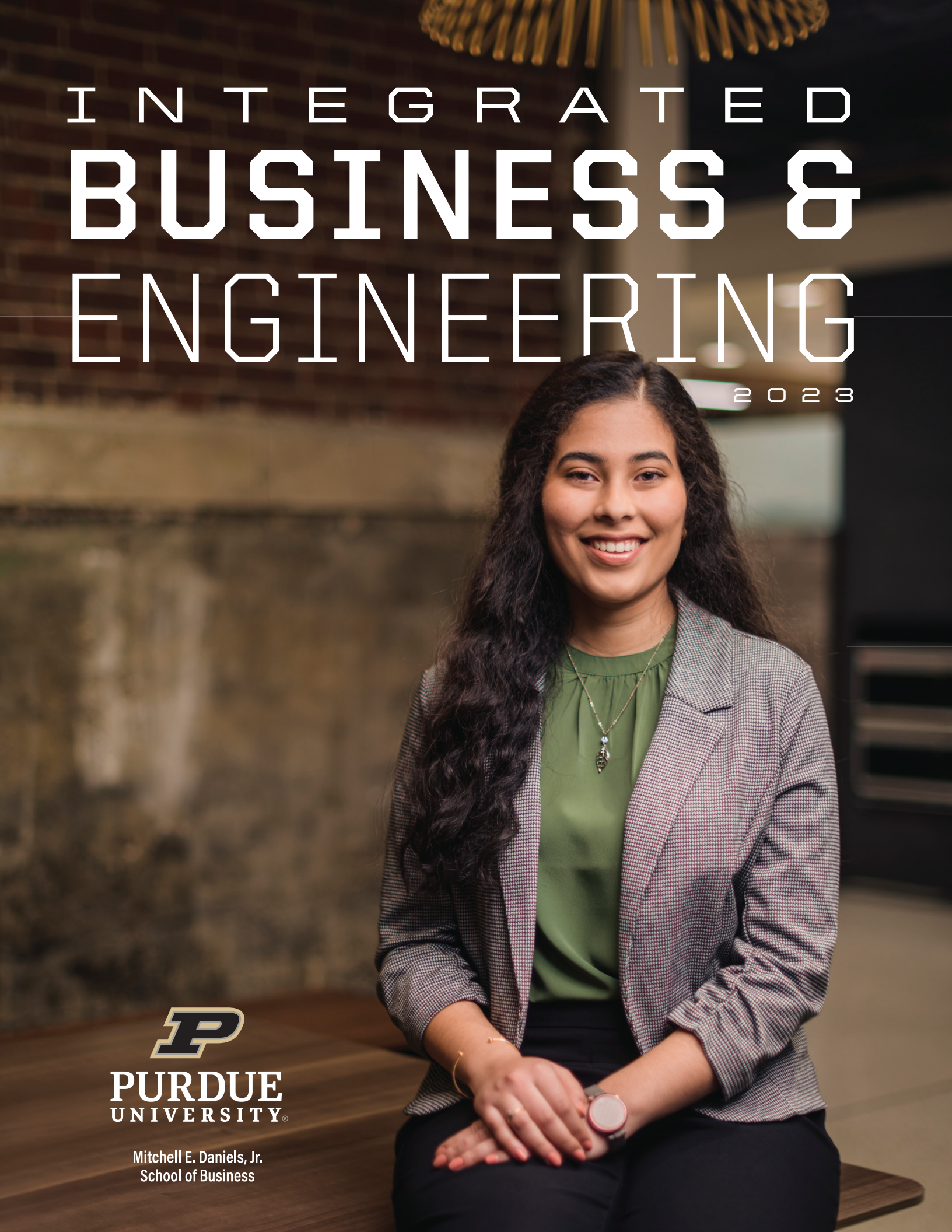
INTEGRATED BUSINESS & ENGINEERING

2023



PURDUE UNIVERSITY

Mitchell E. Daniels, Jr.
School of Business

ABOUT

IBE

The Integrated Business and Engineering (IBE) program at Purdue University's Mitchell E. Daniels, Jr. School of Business launched in fall 2021. It is offered in partnership with the College of Engineering. The program's integrated curriculum sits at the intersection of disciplines and teaches students to be fluent in engineering, business, and design.

Purdue University recently committed at least $100 million dollars to transform the Daniels School. The IBE program is at the core of the new STEM-focused, experiential vision for the school. The business school's transformation is attracting attention from higher education publications like Poets&Quants, which named the Daniels School a 2023 Undergraduate Business School to Watch.

CREDIT HOURS

47
BUSINESS CORE & ELECTIVES

32
ENGINEERING/SCIENCE CORE& ELECTIVES

13
INNOVATION LAB

14
AREA SPECIALTY & ELECTIVES

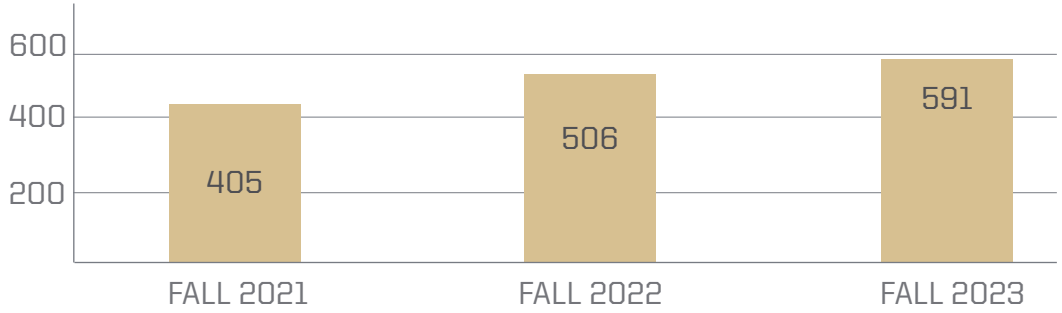
PROGRAM

GROWTH

At inception, we aimed for 50 elite students. But student demand and industry interest in the program has been so strong that we now aim to reach 200 incoming freshmen. IBE is well on its way, with approximately 140 students for fall 2023.

Demand for this flagship program will continue to grow.

GROWTH IN APPLICATIONS



GPA	
IBE	3.82
BUSINESS SCHOOL	3.71

SAT SCORES	
IBE	BUSINESS SCHOOL
1351	1278

ACT SCORES	
IBE	BUSINESS SCHOOL
30.1	28.6

RAISING THE BAR

The average GPA, SAT, and ACT scores for both the IBE program and the business school overall, as of May 2023, show that IBE is raising the profile of the Daniels School.

FOCUS ON

EXPERIENTIAL EDUCATION

IBE places significant emphasis on hands-on learning experiences, providing students with five semesters of experiential education opportunities. By partnering with the College of Engineering, we immerse students in meaningful projects that solve real-world problems, including Vertically Integrated Projects (VIP) and EPICS (Engineering Projects in Community Service), during their freshman and junior years. Both IBE students and engineering students benefit from working cross functionally in teams. Business students learn to appreciate how engineers think, and engineering students learn to consider business implications.

Additionally, our curriculum incorporates corporate partnerships that offer students an invaluable apprenticeship-like experience, both within and outside of the classroom. In the 2021-22 academic year, we successfully introduced Caterpillar, Inc.-sponsored capstone projects for our first-year IBE cohort's Microeconomics courses in the spring semester. In fall 2022, we launched the Market Games: Introduction to Business Game (Simulation) as part of the IBE #1 Seminar. This simulation not only complements the course objectives but also brings decision-making to life through interactive team-based business scenarios. In IBE seminar #2, our students participated in an IBE + ID Innovation Hackathon, collaborating with the College of Liberal Arts' Industrial Design (ID) program, and co-sponsored by dormakaba. This two-day immersive learning opportunity allowed IBE students to explore design thinking under the guidance of senior ID students and industry mentors from dormakaba, providing a truly enriching experience (Design Thinking for Good: purdue.university/ibehackathon). We continuously strive to enhance experiential learning by integrating practical experiences into regular classes.

Each IBE student will have 5 semesters of
HANDS-ON LEARNING
and no less than 3
CORPORATE PARTNERSHIP PROJECTS
during their time at the business school.

INNOVATION LAB

Our vision for the Innovation Lab is to create a dynamic space that fosters interdisciplinary collaboration among IBE students and students from other colleges. Equipped with cutting-edge technologies such as Metaverse, Robotics, Electric Vehicles, Unmanned Aerial Systems/ "Drones," and Internet of Things, this lab will be supported by various industries, including hospitals, automotive companies, utilities, and semiconductor manufacturers. We plan to fund the lab through sponsorships from technology companies and industries, allowing students to engage in real-world projects that provide hands-on experience in utilizing the latest technologies to solve complex problems. This practical exposure will not only prepare our students for the job market but also provide valuable insights into how industries harness these technologies.

In fall 2022, the IBE program successfully launched its first organic Innovation Lab Project in VIP: an EV Go-Kart, which explored the EV and Motorsports industries. The project team established a temporary innovation lab in Krannert B015, where they completed the assembly and raced their stock EV Go-Kart, named the "Mitch Mobile," in the 2023 Spring evGrand Prix.

We are currently developing the second Innovation Lab Project in collaboration with Meta, within the metaverse Horizon Worlds. This project aims to create a new world that emulates a social space for Purdue students to meet, interact, study, socialize, explore, and more. Students will have the opportunity to navigate the space using eXtended Reality (XR) headsets, immersing themselves in an environment that showcases the essence of being a Boilermaker.

The IBE program will launch multiple organic "Innovation Projects" in the future, leveraging the resources and expertise of the Innovation Lab to create new and exciting opportunities for students. The lab serves as a valuable resource, allowing IBE students to explore their interests and passions through project-based learning, while developing the skills and knowledge required to excel in the field of innovation.

Plans for the Daniels School's new facility include space for an innovation lab, enabling the expansion of multidisciplinary and active learning opportunities and strengthening partnerships with fellow colleges and schools at Purdue.

CAREER SERVICES &

OUTCOMES

IBE students are uniquely positioned to attract the interest of organizations that recognize the value of technology within their companies and seek employees with a strong foundation in business principles. These companies are eager to distinguish themselves from competitors by hiring talented bridge builders and translators.

We collaborate with the Daniels School of Business career services office and Purdue's Center for Career Opportunities to share information about IBE to industry partners. Additionally, we co-sponsored the Purdue Engineering Student Council's EXPO Employer Breakfast with the Office of Professional Practice in spring 2023. We will continue to sponsor both this event and the student council's Industrial Roundtable Employer Breakfast in the 2023-34 academic year.

By engaging with industry partners and fostering strong relationships, we aim to provide IBE students with outstanding career opportunities that align with their unique skill sets and interests. It's working. IBE students are highly sought after and are filling a wide variety of internship roles in business communications, global sales and operations, supply chain, manufacturing/quality engineering and more at top companies including:

Rolls-Royce, at&t, CAT, gm, Avery Dennison, Deloitte., Elevance Health, Collins Aerospace

Sam Wadlington, IBE '25, was drawn to Purdue by the IBE program. A member of the program's first cohort, he has received the Dr. Charlene Sullivan Transformative Impact Award as well as the Daniels School of Business Outstanding Sophomore Award. He interned at Rolls-Royce first in Civil Aerospace Procurement, and returns to the company for a second internship as a Program Management Intern.

STUDENT

IMPACT

The creation of IBE called for a dose of inspiration — and it's paying off. The program is living up to the expectations students had when they applied to the new major.

"The curriculum for Integrated Business and Engineering is preparing me for my career goals because it is structured in a way that allows me to gain knowledge in both business and engineering fields, so that I can make data-driven business decisions in the future."

VAIBHAVI CHAMIRAJU
IBE '26

"The IBE program has given me the chance to learn in smaller, more communal groups and has offered me many experiential learning opportunities that I would otherwise not have."

XANDER ROLAND
IBE '25

"I have learned to translate more technical terms into common language and feel I could explain any project I am working on to someone who has no experience in either the business or engineering field."

ALYSSA YOUNKER
IBE '25

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EA/EOU