



# *GRANDPARENTS*

UNIVERSITY®

PURDUE FOR LIFE FOUNDATION





## **WELCOME TO** ***GRANDPARENTS UNIVERSITY!***

The Purdue for Life Foundation is thrilled that you are here on Purdue's beautiful West Lafayette campus. Whether you're a young Boilermaker or a Boilermaker who is young at heart, these next two days will be filled with opportunities to learn with each other and from each other.

So get ready to discover the incredible curriculum our Purdue faculty and staff have prepared; laugh together during hands-on activities, classes, free time, and field trips; and create lasting memories along the way.



**HAIL PURDUE // BOILER UP !**



# THURSDAY SCHEDULE

8-10AM

## Registration // Stewart Center

Light refreshments will be served during this time.

10-11:30AM

## Campus Field Trips

Get ready to explore campus during your assigned field trip! Shuttle buses will be parked around Memorial Mall for field trips that require transportation.

- Bands and Orchestras
- Bechtel Innovation Design Center
- Campus Bus Tour\*
- Envision Center
- Purdue Airport\*
- Purdue Athletics: Swimming and Diving\*

11:45AM-1PM

## Opening Session and Lunch

*Purdue Memorial Union Ballrooms*

Join us to learn about the two days ahead, meet the GPU staff and team leaders, and learn the words to "Hail Purdue!"—the greatest fight song in the nation!

1-1:30PM

## Transition to Majors

We hope you have a wonderful time learning together! Shuttle buses will be parked around Memorial Mall for majors that require transportation.

- ABCs of ABE\*
- All the Small Things\*
- Advancing Animal Health\*
- Building Your World
- Engineering Space Exploration
- Exploring Atmospheres
- Green Thumb\*
- Microbes to Medicines
- Running a Restaurant
- STEM-it!\*
- The Art of Improv
- The Power of Podcasting\*
- Understanding Nature\*

*\*Transportation required. Please refer to your campus map and the signs posted in the bus windows to ensure you get on the correct bus.*

1:30-4:30PM

## Class Time

Each major will have a 15-minute snack break, with snacks provided.

4:30-5PM

## Transition to Dinner and Evening Activities

5-7PM

## Boilermaker Block Party // Memorial Mall

Get ready for an incredible evening of food trucks and fun! After indulging in kebabs, quesadillas, corn dogs, and other great food, enjoy inflatables, a balloon artist, caricatures, face painting, and craft opportunities!

*Please remember that grandparents must be with their grandchildren at all times. Evening activities are only for registered participants of Grandparents University.*

7-9PM

## Movie at the Union // North Ballroom

Join us for a showing of *Lightyear*, a movie that directly corresponds to the work of one of our speakers, Sharon Hagle. Hagle is the founder of SpaceKids Global, a nonprofit that encourages students to pursue careers in space exploration and technology. Last year, Hagle and her husband, Marc—a Purdue graduate with degrees in electrical engineering and industrial administration—became the first married couple on a commercial space flight.





# FRIDAY SCHEDULE

7:30-8:30AM

## Breakfast

*Purdue Memorial Union South Ballroom*

8:30-9AM

## Transition to Majors

Shuttle buses will be parked around Memorial Mall for majors that require transportation.

9-11:30AM

## Class Time

Each major will have a 15-minute snack break, with snacks provided.

11:30AM-NOON

## Transition to Lunch

NOON-1PM

## Lunch

*Purdue Memorial Union South Ballroom*

1:30-2:30PM

## Graduation Ceremony

*Purdue Memorial Union North Ballroom*

Congratulations! You are officially a graduate of Grandparents University 2023. All participants will receive a special Purdue gift for completing the program, and grandchildren will be recognized on stage for their GPU achievements.








CREATE LASTING  
MEMORIES



# CAMPUS MAP

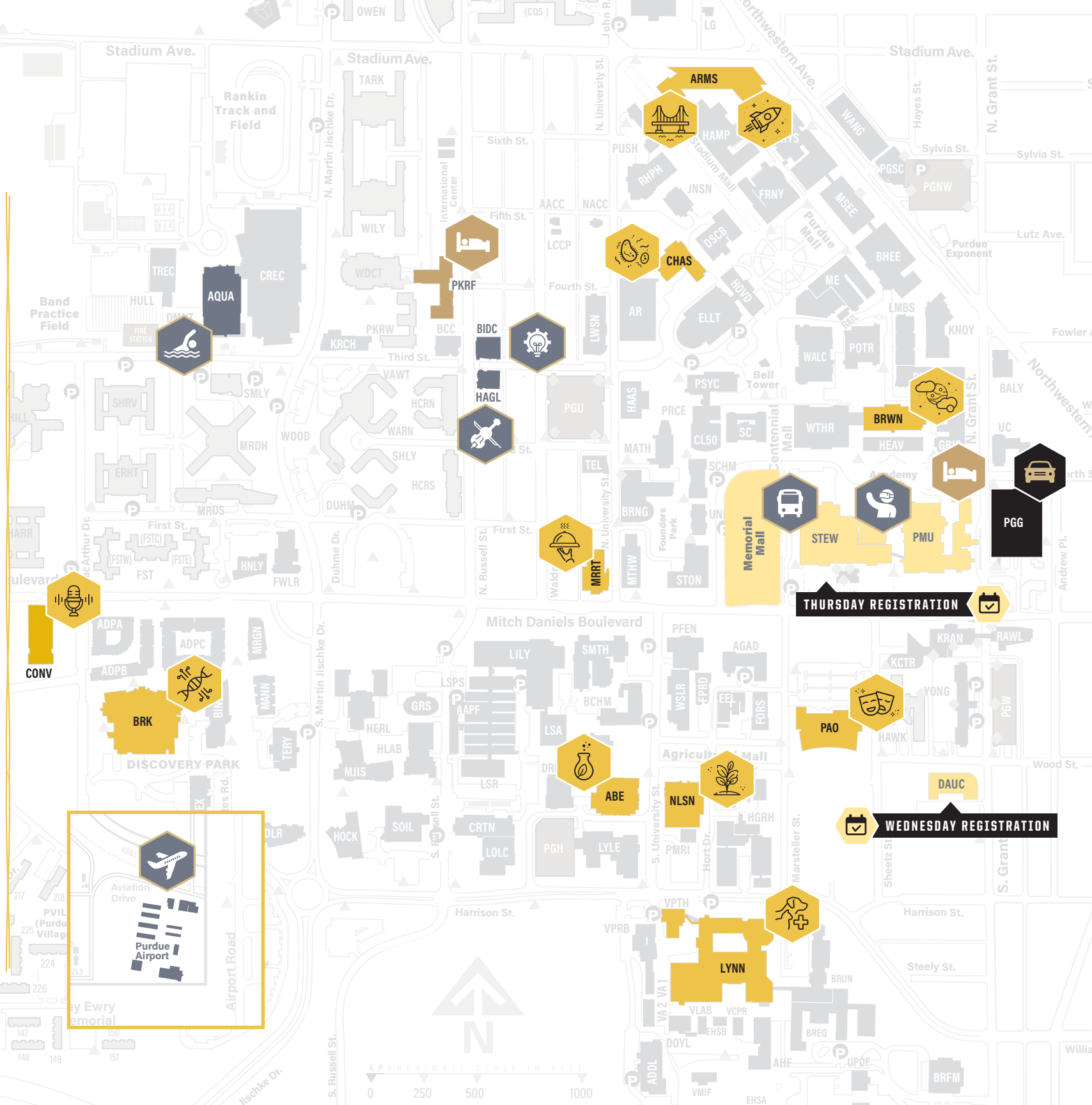
## MAP KEY

-  Event Locations
-  Major Locations\*
-  Field Trip Locations
-  On-Campus Lodging
-  Grant Street Garage

\*Please note: Two majors, STEM-it! and Understanding Nature, will be taking place off campus and are not pictured.

## PARKING





Attendees are encouraged to park in the Grant Street Garage. Daily fees will apply. For more information, including garage rates, parking passes, and accessible options, please visit [purdue.edu/visit/getting-here/parking.php](http://purdue.edu/visit/getting-here/parking.php).











# CAMPUS MAP

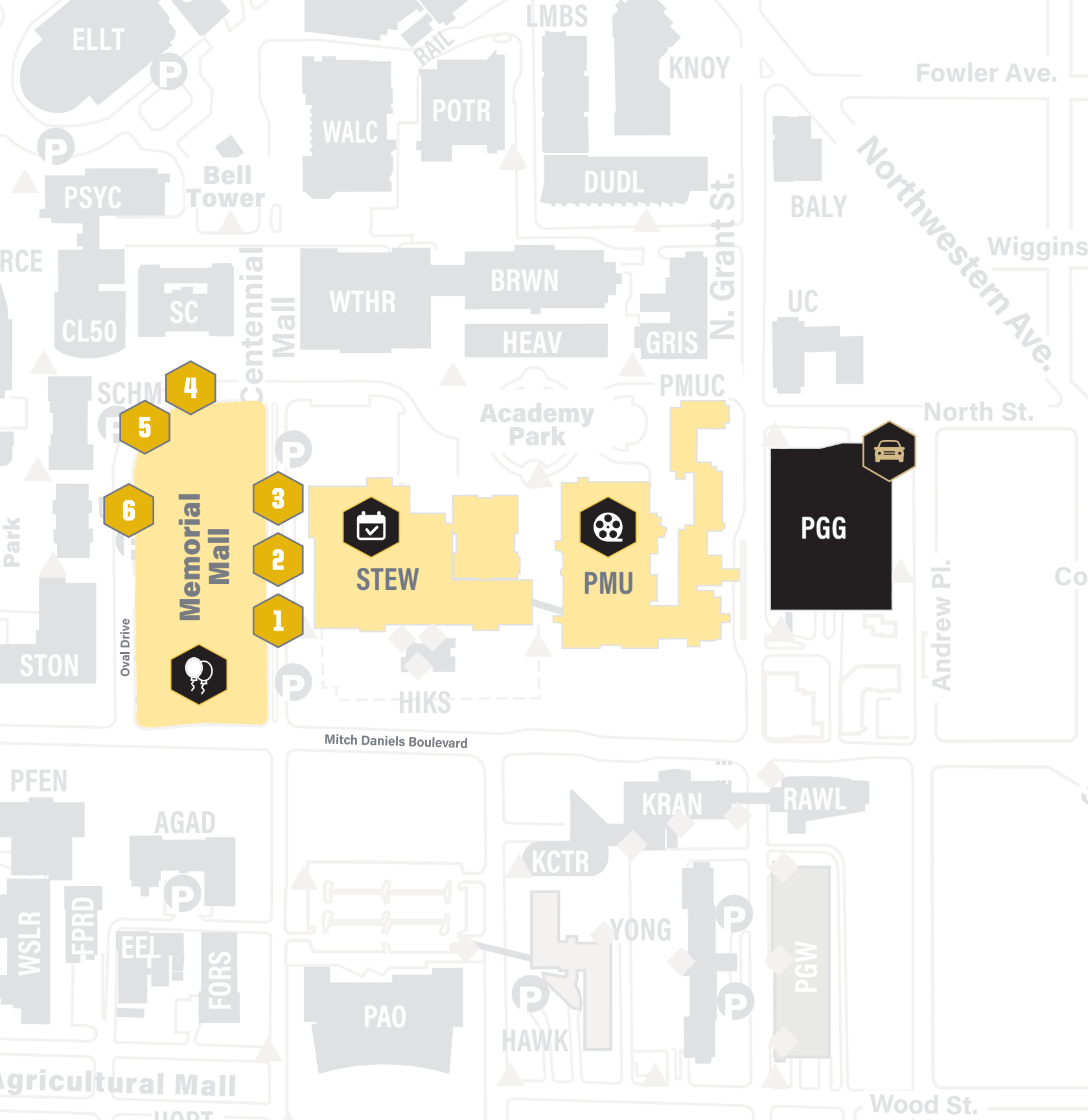
## MAP KEY

-  Movie at the Union
-  Thursday Registration
-  Boilermaker Block Party
-  Grant Street Garage

## SHUTTLE BUSES

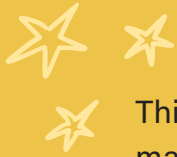
Shuttle buses will be parked around Memorial Mall for majors and field trips that require transportation.

-  1 Purdue Airport // Understanding Nature
-  2 Purdue Athletics: Swimming & Diving // STEM-it!
-  3 Campus Bus Tour #1 // The Power of Podcasting // All the Small Things
-  4 Campus Bus Tour #2 // Advancing Animal Health
-  5 Green Thumb
-  6 ABCs of ABE

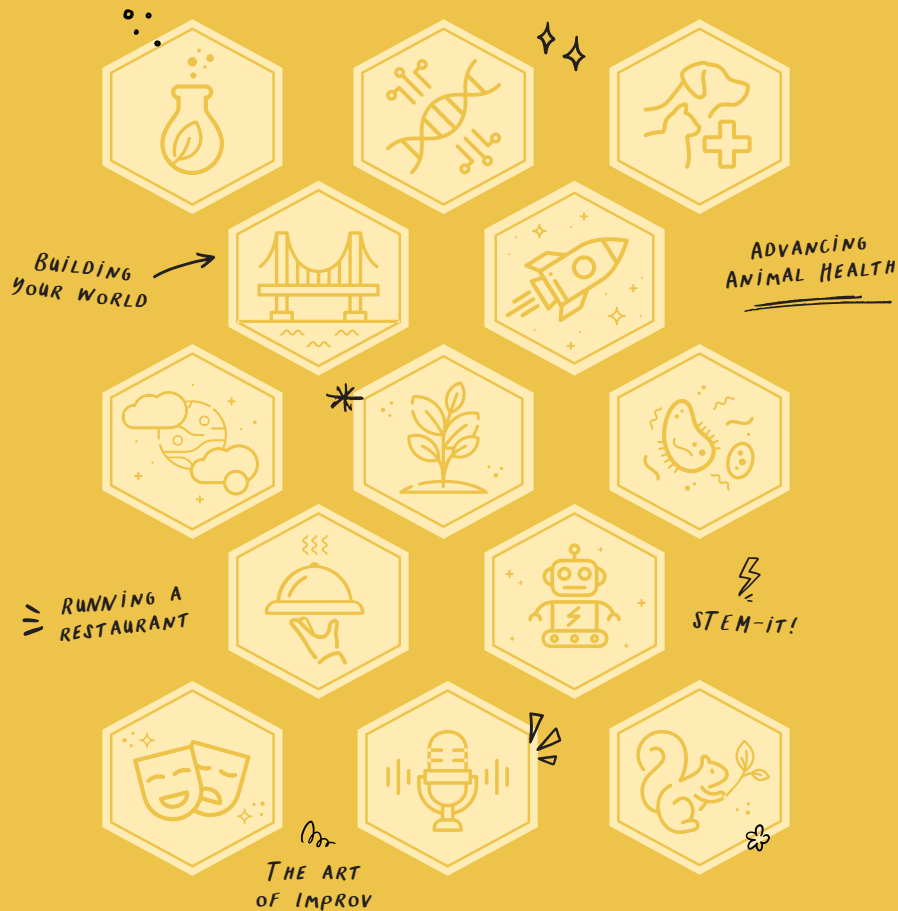




# MAJORS



This year, there are 13 Grandparents University majors being offered, all of which are taught by Purdue faculty and staff. An adult must accompany each child at all times during activities related to the major.



## ABCs OF ABE

<b>TAUGHT BY:</b>	Mandy Limiac
<b>FACILITATED BY:</b>	Agricultural and Biological Engineering
<b>AGE GROUP:</b>	7-14
<b>ACTIVITY LEVEL:</b>	High
<b>LOCATION:</b>	Agricultural and Biological Engineering // ABE

Experience the world of agricultural and biological engineering—from farm and forest to food and pharmaceuticals! You'll learn how precision-agriculture technology is advancing global agricultural production, discover how ecological engineers create designs and restore natural ecosystems, and hear how bioprocess engineers combine multiple concepts to design industrial processes.

### EXAMPLES OF ACTIVITIES:

- Discover how drones and robots are pushing agriculture into the digital age—and then fly/drive them
- Explore a stream redesign site
- Get a taste for bioprocess engineering by making popping boba





## ALL THE SMALL THINGS

TAUGHT BY:	Ron Reger
FACILITATED BY:	Office of Research
AGE GROUP:	7–14
ACTIVITY LEVEL:	Low
LOCATION:	Birck Nanotechnology Center // <i>BRK</i>

Can you imagine a world that's too small to see? Introducing nanotechnology! Explore nanoscale science and engineering, and learn about their impacts on society. By engaging with engineers and scientists, you'll discover the promising development of revolutionary materials and technologies.

### EXAMPLES OF ACTIVITIES:

- Experiment with and manipulate liquid crystals and thin films
- Tour the nanotechnology center's research clean room
- Watch a nano ice cream demonstration, and enjoy a sweet treat after



## ADVANCING ANIMAL HEALTH

TAUGHT BY:	Chad Brown
FACILITATED BY:	College of Veterinary Medicine
AGE GROUP:	11–14
ACTIVITY LEVEL:	Medium
LOCATION:	Charles J. Lynn Hall of Veterinary Medicine // <i>LYNN</i>

Discover some of the day-to-day activities of a veterinarian and veterinary nurse. You'll get to see what they see by working directly with live animals, studying X-rays, and even examining the microorganisms that live inside of a cow's stomach!

### EXAMPLES OF ACTIVITIES:

- Practice physical exam techniques on a dog
- Reach inside of a cow's stomach
- Look at blood cells under a microscope





## *BUILDING YOUR WORLD*

<b>TAUGHT BY:</b>	Juliana Pereira and staff from the Women in Engineering Program
<b>FACILITATED BY:</b>	Lyles School of Civil Engineering
<b>AGE GROUP:</b>	7–14
<b>ACTIVITY LEVEL:</b>	Low
<b>LOCATION:</b>	Neil Armstrong Hall of Engineering // ARMS

Have you ever thought about who designs the structures around you—things like buildings, bridges, and roads? That would be civil engineers! Using imagination and innovation, civil engineers create sustainable designs that we see every day, and now it's your turn!

### **EXAMPLES OF ACTIVITIES:**

- Create your very own structure
- Learn how buildings are designed to withstand extreme weather
- Discover how engineers are preparing cities for the future



## *ENGINEERING SPACE EXPLORATION*

<b>TAUGHT BY:</b>	Brianne Wrede and staff from the Women in Engineering Program
<b>FACILITATED BY:</b>	Aeronautical and Astronautical Engineering
<b>AGE GROUP:</b>	7–14
<b>ACTIVITY LEVEL:</b>	Low
<b>LOCATION:</b>	Neil Armstrong Hall of Engineering // ARMS

When you think about going to space, you probably think about astronauts. But what about engineers? Through the design, creation, and operation of aircraft, rockets, and space-based systems, engineers play a big part in space exploration! Explore space from an engineer's perspective, and learn about their roles in recent missions to space.

### **EXAMPLES OF ACTIVITIES:**

- Build your very own rocket
- Conduct a lunar ice-breaking challenge





## EXPLORING ATMOSPHERES

TAUGHT BY:	Sarah Nern, Steven Smith, and Bill Bayley
FACILITATED BY:	College of Science
AGE GROUP:	11–14
ACTIVITY LEVEL:	Medium
LOCATION:	K–12 Outreach Lab in the Herbert C. Brown Laboratory of Chemistry // <i>BRWN</i>

Go on a mission to discover various elements that exist in the atmosphere and how they can help us learn more about the world around us. Explore the physical processes that drive our Earth’s atmosphere—and even the atmospheres of other planets!

### EXAMPLES OF ACTIVITIES:

- Understand planetary processes through hands-on investigations
- Collect atmospheric data and submit it to a NASA database
- Learn how to conduct scientific demonstrations



## GREEN THUMB

TAUGHT BY:	Anna Williams
FACILITATED BY:	College of Agriculture
AGE GROUP:	11–14
ACTIVITY LEVEL:	Medium
LOCATION:	Nelson Hall of Food Science // <i>NLSN</i>

Ready to get your hands dirty? Explore the world of plants, and dig into how you can grow your own food! By discovering the structure, components, and various functions of plants, you will be able to make your own plants grow and thrive.

### EXAMPLES OF ACTIVITIES:

- Identify soil types and their properties
- Dissect a flower
- Plant your own indoor herb garden





## *MICROBES TO MEDICINES*

<b>TAUGHT BY:</b>	Elizabeth Parkinson
<b>FACILITATED BY:</b>	Department of Chemistry
<b>AGE GROUP:</b>	11–14
<b>ACTIVITY LEVEL:</b>	Low
<b>LOCATION:</b>	Chaney-Hale Hall of Science // CHAS

Get ready to look at dirt like a scientist, and explore the bacteria that live in your own backyard! Discover how the bacteria found in soil can be used to make antibiotics—maybe even ones you’ve taken!

### **EXAMPLES OF ACTIVITIES:**

- Isolate bacteria from soil
- Learn how microorganisms make molecules that we use as medicines
- Observe *Streptomyces* bacteria and the colored compounds that they produce.



## *RUNNING A RESTAURANT*

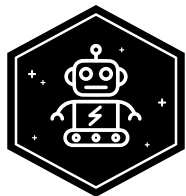
<b>TAUGHT BY:</b>	Bruce Goad
<b>FACILITATED BY:</b>	White Lodging-J.W. Marriott, Jr. School of Hospitality and Tourism Management
<b>AGE GROUP:</b>	7–14
<b>ACTIVITY LEVEL:</b>	Low
<b>LOCATION:</b>	Marriott Hall // MRRT

Opening a dream restaurant is only the beginning—you have to make money to stay in business! Discover the secrets to great hospitality and the details that make a food-service operation successful, including cleanliness, wonderful employees, and—of course—delicious menus!

### **EXAMPLES OF ACTIVITIES:**

- Design a menu
- Make your own dish in a commercial kitchen
- Practice managing your restaurant’s money in a fun competition





## STEM-IT!

<b>TAUGHT BY:</b>	Sascha Harrell
<b>FACILITATED BY:</b>	Purdue's Indiana Manufacturing Competitiveness Center
<b>AGE GROUP:</b>	7–14
<b>ACTIVITY LEVEL:</b>	Low
<b>LOCATION:</b>	Indiana Manufacturing Institute

Discover new ways to design, innovate, solve problems, and create through STEM! From building with Legos to working with robots, get ready to explore just how fun and exciting science, technology, engineering, and math can be—and find out why STEM is important.

### EXAMPLES OF ACTIVITIES:

- Experience 3D printing
- Explore STEM through robotics, including Dobot, Dash and Dot, and Sphero
- Tour a micromanufacturing test bed



## THE ART OF IMPROV

<b>TAUGHT BY:</b>	Julie Baumann and Abby Laufman
<b>FACILITATED BY:</b>	Department of Theatre
<b>AGE GROUP:</b>	7–14
<b>ACTIVITY LEVEL:</b>	Medium
<b>LOCATION:</b>	Yue-Kong Pao Hall of Visual and Performing Arts // PAO

The stage is set. Now all we need is you! Discover the world of improv theater, where there are no scripts—just creativity at its finest. Through acting exercises and games, get ready to build your confidence and awareness in a unique team-building atmosphere!

### EXAMPLES OF ACTIVITIES:

- Become performance-ready through acting warm-ups and exercises
- Create your own theatrical scenes
- Go on a backstage tour of a Purdue theater





## THE POWER OF PODCASTING

TAUGHT BY:	Kate Young
FACILITATED BY:	Purdue University Marketing and Communications
AGE GROUP:	7–14
ACTIVITY LEVEL:	Low
LOCATION:	Convergence Center // <i>CONV</i>

Purdue uses its podcast to tell all kinds of stories—from scientists who create life-saving cancer treatments to legendary Purdue athletes and coaches. Explore how you can create a podcast to tell your own stories! You'll even get to hear behind-the-scenes info from your favorite Boilermakers.

### EXAMPLES OF ACTIVITIES:

- Learn how to prepare and conduct an interview
- Discover more about the podcast industry
- Create your very own short podcast clip



## UNDERSTANDING NATURE

TAUGHT BY:	Ben McCallister and Brian McGowan
FACILITATED BY:	Urban Forestry and Wildlife
AGE GROUP:	7–14
ACTIVITY LEVEL:	High
LOCATION:	John S. Wright Forestry Center in Martell Forest

How can you tell if a tree is healthy? How can we use the environment around us to make decisions for the future? Discover the various techniques urban forestry and wildlife specialists use to gather information from nature!

### EXAMPLES OF ACTIVITIES:

- Determine the health of a tree through a tree-climbing workshop
- Learn about radio telemetry, a technique used to measure animals' movements and habits





## ***HAIL PURDUE***

### **FIRST VERSE**



To your call once more we rally;  
Alma mater hear our praise;  
Where the Wabash spreads its valley,  
Filled with joy our voices raise.  
From the skies in swelling echoes  
Come the cheers that tell the tale  
Of your vict'ries and your heroes,  
Hail Purdue! We sing all hail!

### **CHORUS**



Hail, hail to old Purdue!  
All hail to our old gold and black!  
Hail, hail to old Purdue!  
Our friendship may she never lack.  
Ever grateful, ever true,  
Thus we raise our song anew  
Of the days we've spent with you,  
All hail our own Purdue!







PURDUE FOR LIFE  
FOUNDATION

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Give back.