PURDUE UNIVERSITY | Office of Summer and Winter Sessions

Welcome to Purdue!

Atoms at Work Summer Course

July 5th-10th, 2026

Sunday, July 5	
3:00pm – 5:00pm	Check-in *Meredith South Residence Hall*
5:00pm – 5:15pm	Say "see you soon" to families *Parents will depart after student is checked in and **before** program orientation.*
5:15pm – 5:45pm	Program Orientation for **Understanding Research, Atoms at Work, Supply Chain and Business Analytics, and You Can't Make it Without Materials** *Meredith South Residence Hall – Multipurpose Room (off main lobby)*
5:45pm – 6:15pm	Program Orientation for **Maximizing Impact Through Engineering (MITE) and Entertainment Machine Design Challenge** *Meredith South Residence Hall – Multipurpose Room (off main lobby)*
5:45pm – 7:00pm	After Orientation for **Understanding Research, Atoms at Work, Supply Chain and Business Analytics, and You Can't Make it Without Materials:** Walk to dinner and eat with your peer mentor group *Wiley Dining Court*
6:15pm – 7:00pm	After Orientation for **Maximizing Impact Through Engineering (MITE) and Entertainment Machine Design Challenge:** Walk to dinner and eat with your peer mentor group *Wiley Dining Court*
7:00pm –10:00pm	Peer Mentor Group Activities/Free Time *Various Locations*
9:00pm – 10:00pm	Check-in for curfew by 9:30 pm *Meredith South Residence Hall – On your floor*

Monday, July 6	
7:00am – 8:15am	Breakfast *Wiley Dining Court*
8:15am – 8:30am	Walk to Class – Peer Mentors *WALC 3084*
8:30am – 9:00am	Welcoming and initial introductions *WALC 3084*
9:00 am – 9:50 am	Introduction to radiation lecture – Nathan Foster *WALC 3084*
10:00 am – 10:50 am	Detector basics and shielding lecture – Hannah Pike *WALC 3084*
11:00 am – 11:40 pm	Faculty research presentation – Dr. Lefteri Tsoulakas *LMBS 5281S*
11:40am – 11:45am	Walk to Lunch – Peer Mentors *Wiley Dining Court*
11:45am – 1:10pm	Lunch & Break – Peer Mentors *Wiley Dining Court*

1:10pm – 1:15pm	Walk to Class – Peer Mentors *BHEE B073*
1:15pm – 2:15pm	Reactor and NERL tour - True Miller, Riley Madden, Brian Jowers *BHEE B073*
2:15 pm – 4:30 pm	Cloud chamber activity and measuring radiation lab, outside detector measurements *BHEE B073*
5:00pm – 5:10pm	Walk to Dinner – Peer Mentors
5:00pm – 7:00pm	Dinner & Break – Peer Mentors *Wiley Dining Court*
7:00pm – 9:00pm	Board Games, Video Games and All Class Social – Peer Mentors *Meredith South Lobby and Glass Conference Room*
9:00pm – 10:00pm	Course Work / Free Time / Check-in for curfew by 9:30 pm *Meredith South – On your floor*

Tuesday, July 7	
7:00am – 8:15am	Breakfast *Wiley Dining Court*
8:15am – 8:30am	Walk to Class – Peer Mentors *WALC 3084*
8:30am – 9:20am	Half-lives, Isotopes, cross-sections, and radiation interactions lecture – Riley Madden *WALC 3084*
9:30 am – 10:20 am	Neutron Activation, source activity, gamma spectroscopy and nuclear fuel lecture – Zachary Ehmann *WALC 3084*
10:30 am – 11:30 pm	Thermal hydraulics lab tour and laminar flow around bodies demonstration – Dr. Shripad Revankar *BHEE B086*
11:30am – 11:45am	Walk to Lunch – Peer Mentors *Wiley Dining Court*
11:45am – 12:45pm	Lunch & Break – Peer Mentors *Wiley Dining Court*
12:45pm – 1:00pm	Walk to Class – Peer Mentors *BHEE B073*
1:00pm – 2:20pm	Gamma attenuation lab *BHEE B073*
2:30 pm – 4:30 pm	Half-life determination from sub-critical pile samples *BHEE B073*
5:00pm – 5:10pm	Walk to Dinner – Peer Mentors
5:00pm – 7:00pm	Dinner & Break – Peer Mentors *Wiley Dining Court*
7:00pm – 9:00pm	Outdoor Games and Co-Rec Time – Peer Mentors or Movie Night *Intramural Field 3 and Co-Rec / TBD*
9:00pm – 10:00pm	Course Work / Free Time / Check-in for curfew by 9:30 pm *Meredith South – On your floor*

Wednesday, July 8	
7:00am – 8:15am	Breakfast *Wiley Dining Court*

8:15am – 8:30am	Walk to Class – Peer Mentors *WALC 3084*
8:30am – 9:10am	Fission, fusion, nuclear terminology, and simplified reactor physics lecture – Nathan Tollet *WALC 3084*
9:20 am – 10:00 am	Power production, reactor types, and nuclear accidents – Jonah Young *WALC 3084*
10:15 am – 11:30 pm	PRIME Lab Tour *Physics Building*
11:30am – 11:45am	Walk to Lunch – Peer Mentors *Wiley Dining Court*
11:45am – 12:45pm	Lunch & Break – Peer Mentors *Wiley Dining Court*
12:45pm – 1:00pm	Walk to Class – Peer Mentors *BHEE B073*
1:00pm – 2:20pm	Subcritical multiplication lab *BHEE B073*
2:30 pm – 4:00 pm	Subcritical pile flux measurement lab *BHEE B073*
4:00 pm – 4:15 pm	Load vans to cookout
4:15 pm – 6:30 pm	Cookout at Happy Hollow Park *Happy Hollow Park*
7:00pm – 9:00pm	Movie Night and Crafts – Peer Mentors *Meredith South Lobby and Glass Conference Room*
9:00pm – 10:00pm	Course Work / Free Time / Check-in for curfew by 9:30 pm *Meredith South – On your floor*

Thursday, July 9	
7:00am – 7:15am	Load Buses - Everyone
7:15am – 9:30am	Travel to DC Cook Nuclear Power Plant
9:30am – 3:00pm	Tour of DC Cook Nuclear Power Plant
3:00pm – 5:00pm	Travel back to Purdue and drop off at dorms
5:00pm – 5:10pm	Walk to Dinner – Peer Mentors
5:00pm – 7:00pm	Dinner & Break – Peer Mentors *Wiley Dining Court*
7:00pm – 9:00pm	Fountain Runs – Peer Mentors *Start at Loeb Fountain*
9:00pm – 10:00pm	Course Work / Free Time / Check-in for curfew by 9:30 pm *Meredith South – On your floor* ***Plan to use a portion of this time to begin to pack your belongings.

Friday, July 10	
7:00am – 8:15am	Breakfast *Wiley Dining Court*

	***Plan to use a portion of this time to check out of the residence hall and place your luggage in the **Meredith South Multipurpose Room** for storage while you finish sessions throughout the morning and afternoon. (The Meredith South Multipurpose Room is where you had orientation on Sunday evening.) **You will turn in your room key to Conference Services staff at this time.** **You will check out with Office of Summer and Winter Sessions staff before leaving campus.**
8:15am – 8:30am	Walk to Class – Peer Mentors *WALC 3084*
8:30am – 9:20am	Power production continued, SMR's and advanced reactors, nuclear fuel cycle – Elizabeth Dunlevy *WALC 3084*
9:30 am – 10:20 am	Additional uses of nuclear, PUR-1, ALARA refresher and HPGe and Maestro software basics lecture – William Richards *WALC 3084*
10:30 am –11:20 pm	Faculty research presentation – Dr. Stylianos Chatzidakis *LMBS 5281S*
11:30am – 11:45am	Walk to Lunch – Peer Mentors *Wiley Dining Court*
11:45am – 12:45pm	Lunch & Break – Peer Mentors *Wiley Dining Court*
12:45pm – 1:00pm	Walk to Class – Peer Mentors *BHEE B073*
1:00pm – 3:30pm	Unknown sample irradiation in PUR-1 lab/Tours *BHEE B073*
3:00pm – 3:10pm	Walk to Check out– Peer Mentors
After 3:00pm	*** Retrieve belongings from luggage storage (**Meredith South Multipurpose Room**), check out with Office of Summer and Winter Sessions staff, and depart campus no later than 5:00pm