# SUMMER at WPI

Frontiers: Pre-College Program





# **FRONTIERS**

Session I: July 9-21 | Session II: July 23-August 4

**FRONTIERS** is an on-campus, residential exploration and learning experience that challenges soon-to-be high school juniors and seniors to explore the outer limits of knowledge in science, technology, engineering, and mathematics (STEM). Attend one or both sessions to immerse yourself in laboratory techniques and unsolved problems across a variety of engineering and science disciplines while experiencing college life firsthand.

Throughout each session, you will focus on one STEM discipline and enroll in one humanities and arts workshop of your choice. You will learn from **WPI** professors and graduate students while using state-of-the-art experimental, analytical, and computer technology.

A full schedule of activities, including evening workshops, field trips, movies, live performances, and tournaments, ensures your stay at WPI is more than just an academic experience. You will meet current WPI students, who serve as program leaders, and interact with other participants from across the country and around the globe.

Audience: Students entering grades 11 and 12 in the fall of 2017

Tuition: \$2,895 for Session I or II, \$4,750 for both sessions Application Deadline: April 15, 2017

See inside back cover for information on pre-college experiences for - younger high school and middle school students.

# SCIENCE, TECHNOLOGY, ENGINEERING, AND MATH SPECIALTIES

In each two-week session, participants will select one of the following science, technology, engineering, and math specialties and one humanities and arts workshop.

### SESSION I -

- ► Aerospace Engineering
- ► Biomedical Engineering
- Biology, Biotechnology, and Bioinformatics
- ► Chemistry and Biochemistry
- ► Civil and Environmental Engineering
- ► Computer Science

- Electrical and Computer
   Engineering
- Interactive Media and Game Development
- Mathematics
- Mechanical Engineering
- Physics

### SESSION II -

- ► Engineering Exploration
- Exploring Our World with Engineering Software
- GenCyber Cybersecurity
- Finance and Actuarial Mathematics
- ► Pre-health
- Psychology
- ► Robotics

## **HUMANITIES AND ARTS WORKSHOP**

### SESSION I

- American History through
   Film and Internet
- Art of Science
- Cinematic Storytelling
- Creative Writing
- Digital Painting

- Elements of Writing
- Global Environmental Problems
- Magic as Performance Art
- Popular Perspectives on Law
- Psychology

### **SESSION II**

- Art of Science
- ► Character Costume Figure Drawing
- Cinematic Storytelling
- Creative Writing
- Elements of Writing

- Global Sustainability
- Music Chorus
- Psychology
- Women's Leadership Academy

For full course descriptions, visit wpi.edu/+frontiers.



# **CAMPUS LIFE**

### LIVING AT WPI

Discover college life at WPI. Frontiers participants live in secure, first-year residence halls, situated along the Quad in the heart of WPI's campus. Participants are assigned to same-gender floors and live in triple-occupancy rooms. Rooms include desks, beds, closets, dressers, and basic linens. Residences offer Internet access, study lounges, and laundry facilities. Students can easily access the dining hall, Rubin Campus Center, academic buildings, and all recreational activities within a short walk.

### DINING

Participants eat all meals in WPI dining facilities. A wide variety of food selections is offered daily, including vegan, vegetarian, kosher, and gluten-free options in addition to a salad bar, hot entrees, sandwiches, and desserts. The dining staff is happy to accommodate any special needs or restrictions with advance notice.

### **FRONTIERS STAFF**

Frontiers is planned and managed by several full-time WPI professional staff who work year round to plan and support summer programs and other pre-college activities. During the summer, we get the entire community involved, including faculty, residential services, and our undergraduate students, who serve as program assistants. The program assistants live in the residence halls with Frontiers participants; 24-hour nursing care is also available. Participants are not allowed to leave campus unsupervised at any time. They must be in their residence hall by 10 pm and are required to check in with staff at that time.

### A TYPICAL DAY AT FRONTIERS

**7:30 am** Breakfast

8:30 am STEM specialties

10:30 am Humanities and Arts workshop

**12:30 pm** Lunch and relaxation

1:30 pm Hands-on lab work

**4:40 pm** Personal Development Workshops (optional)

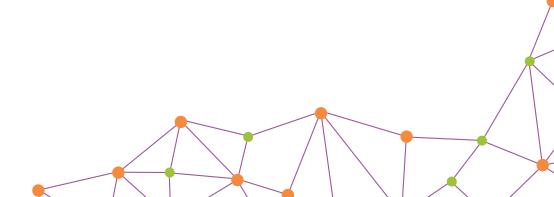
5:00 pm Dinner

**6:30 pm** Evening activities and recreation

**10:00 pm** Return to residence hall for the night

The weekend will include Frontiers Fest, a variety of fun activities, and field trips.

Visit **wpi.edu/+frontiers** for more details about living at WPI, program policies, and what to pack.





# **APPLY NOW**

Applications may be submitted online at wpi.edu/+frontiers and are due with supporting materials by April 15. Completed applications are reviewed on a rolling basis beginning March 1. The earlier you apply, the more likely you are to receive your first choice of workshops.

### **APPLICATION REQUIREMENTS**

- ☐ Must be a current high school sophomore or junior (at the time of application)
- Completed Frontiers 2017 application (available February 4, 2017)
- \$50 application fee
- Recommendation letter from mathematics teacher, science teacher, or guidance counselor
- Essay of up to 500 words on the topic "Why I would like to attend the Frontiers program"
- Official high school transcript, including your current year grades, submitted by guidance counselor
- ☐ TOEFL or IELTs score for non-native English speakers (may be waived by written request)

Application Deadline: April 15, 2017

For detailed instructions on the application process, visit wpi.edu/+frontiers.

# LAUNCH... YOUR PASSION

LAUNCH is a learning and exploration opportunity for soon-to-be high school freshmen and sophomores. Participants may choose to attend Launch as a commuter or to spend the week on campus in the residential program.

You'll spend your days focusing on current problems and challenges in one of the following fields of your choice:

- Biology
- ► Chemistry/Biochemistry
- Computer Science
- Engineering Technology
- Modeling the Environment
- Interactive Media and Game Design
- Physics
- Robotics

Audience: Students entering grades 9-10

August 7–11, day

Cost: \$695

August 6-11, residential

**Cost:** \$1,095

### **SUMMER AT WPI**

WPI offers day and residential summer programs for students ages 7–17. Summer at WPI is your chance to build a robot, research and learn with a group of new friends, or practice the finer points of a favorite sport.

For full program listings and to register, visit wpi.edu/+summer.



**Summer Programs at WPI** 

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