



ACE MENTOR PROGRAM

ARCHITECTURE CONSTRUCTION ENGINEERING

2022
Register today!

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meijer

What is the ACE Mentor Program?

An after-school program, ACE is a form of immersive learning. Mentors provide a hands-on curriculum which reflects many aspects of designing and constructing a building --- for example, reading construction drawings, structural beam design, or cost estimation and bidding.

ACE follows a project-based learning strategy. Mentors meaningfully engage students with realistic design projects that introduce them to the basic skills and knowledge of the design and construction industry. Through personal example, explanation, and tours of offices and construction sites, they also inform students about career paths and work-life in the design and construction profession.

Through ACE, students acquire a set of skills and experiences which are among those cited as essential for the 21st century workplace, including:

- Critical thinking
- Teamwork and collaboration
- Creativity and innovation
- Information technology application
- Communication in cross-cultural environment

The ACE Mentor Program extends over 16 after-school sessions lasting for 2 hours, for an overall total of 32 hours. Several mentors drawn from different design and construction fields pair with students to work as an integrated design team throughout the program.

What will I gain from the ACE Mentor Program?

High school students (grades 9-12) will gain first-hand insight into the design and construction industry, including opportunities to tour an active construction site and engage in a collaborative design project. Students will work closely with mentors to solve challenging, real-world issues by designing and planning a major project as a team.

The ACE Mentor Program will run from October 2021 through March 2022. Our intent is to conduct **virtual conferencing through the end of the year**, with the hope to **resume in-person mentoring sessions in 2022**. The early sessions will be devoted to industry introductions --- professional testimonials, career paths, day-to-day responsibilities, and design thinking exercises --- while the later sessions will be devoted to a collaborative design competition.

Want to learn more?

Send us an email: westMI@acementor.org

Visit our social media (tags below)

Visit our website at: <https://acementor.org/index.php/affiliates/michigan/west-michigan/about-us>

For registration, please follow these instructions:

- Visit app.acementor.org/login
- At the bottom of the login, click "Register as Student"
- Select "MI West Michigan (Greater Grand Rapids)" when asked for affiliate name

****Registration will close Friday, October 8, 2021****

For schedule and program information, please refer to the back of this flyer.



Rendering of the 2021 student project, a proposed homeless shelter at Wealthy and Division.

Program Details

The ACE Mentor Program will run from October 2021 through March 2022. Our intent is to conduct **virtual conferencing through the end of the year**, with the hope to **resume in-person mentoring sessions in 2022**. If our current environment does not permit group gathering, we have a contingency plan in place to conduct virtual conferencing until it is determined safe to do so.

Sessions will run from 5-7pm on Tuesday evenings, and **all in-person sessions will provide food for student and mentor participants**. If selected as part of the 2022 cohort, students are expected to attend all sessions.

Fall 2021

Introduction to architecture, construction, and engineering.

Winter 2021/2022

Construction site visit, “College Night”, and project selection.

Spring 2022

Collaborative design project, with site and project type to be determined by student group.

Curriculum

Week 1 | Program Introduction (10/19/21)

Week 2 | Intro to Engineering (10/26/21)

Week 3 | Intro to Construction (11/2/21)

Week 4 | Intro to Architecture (11/9/21)

Week 5 | Construction Site Visit (11/16/21)

Week 6 | College Night (11/30/21)

Week 7 | Project Kick-Off (12/7/21)

Week 8 | Project Research (12/14/21)

Week 9 | Existing Conditions (1/11/22)

Week 10 | Project Work - Sustainability (1/18/22)

Week 11 | Project Work - Safety (1/25/22)

Week 12 | Project Work - Universal Design (2/1/22)

Week 13 | Project Work (2/8/22)

Week 14 | Project Work (2/15/22)

Week 15 | Presentation Rehearsal (3/1/22)

Week 16 | Final Celebration (3/8/22)