

**An Introduction to:**

**ACE MENTOR**

**CT**

*Engage Excite Enlighten*

# TODAY'S HOST



**Dan Thornton**

Associate Principal  
JCJ Architecture  
ACE CT President



# AGENDA

01

Introduction to ACE

02

Session Structure

03

Mentor + Alumni Spotlight

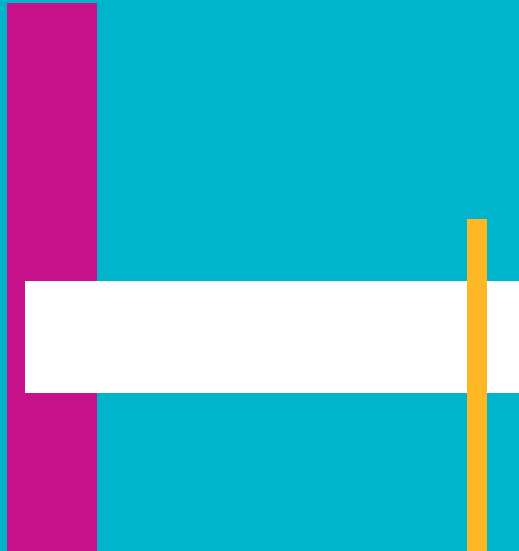
04

Next Steps



# 01

## An Introduction to ACE



# WHAT IS ACE?

- A volunteer after-school program for high school students, grades 9-12
- An opportunity to experience construction industry professions
- Gaining mentorship from knowledgeable professionals
- Exciting hands-on activities
- Designing a project as a team



# ACE MENTOR PROGRAM FACTS



The ACE Mentor Program of America (ACE) was created in 1994 by the integrated design and construction industry to meet its future workforce needs.

Today, this industry's leaders guide, sponsor, and run ACE at the National and local levels.

- ACE's 77 affiliates operate in 37 states, the District of Columbia, Puerto Rico, and Toronto, Canada.
- The 15-session afterschool program is offered free of charge.

**77** AFFILIATES

## MENTORS



- 4,100 volunteer professionals from all industry sectors serve as mentors and team leaders.
- The annual value of their in-kind services totals \$22.4 million.

**4.1K** MENTORS

## STUDENTS



- In the 2019-2020 school year, the program engaged over 10,000 students from 1,450 high schools. 71% come from minority and underserved communities. 36% of students are women.
- 3/4 of high school seniors completing ACE enter a college program in architecture, construction, or engineering or enter a skilled craft.

**10.1K** STUDENTS

## SCHOLARSHIPS



- Since its start, ACE has awarded over \$22 million in scholarships to students intending to study industry-related fields in college or enter a skilled craft training program.
- In 2020, 964 students received \$2.6 million in scholarships.

**\$22.8** MILLION

## ACHIEVEMENTS



ACE and many of its affiliates have earned numerous awards from national and local organizations. Most notable are:

- 2010 Presidential Award for Excellence in Science, Mathematics and Engineering Mentoring (the nation's highest award for mentoring).
- American Institute of Architect awards for collaborative achievement (2014) and diversity (2018).

# LEARN FROM THE PROS

## ARCHITECTURE

- Architects
- Interior Designer
- Landscape Architects

## CONSTRUCTION

- Construction Managers
- Estimators
- Schedulers

## ENGINEERING

- Civil & Structural Engineers
- Mechanical & Plumbing Engineers
- Electrical & Technology Engineers



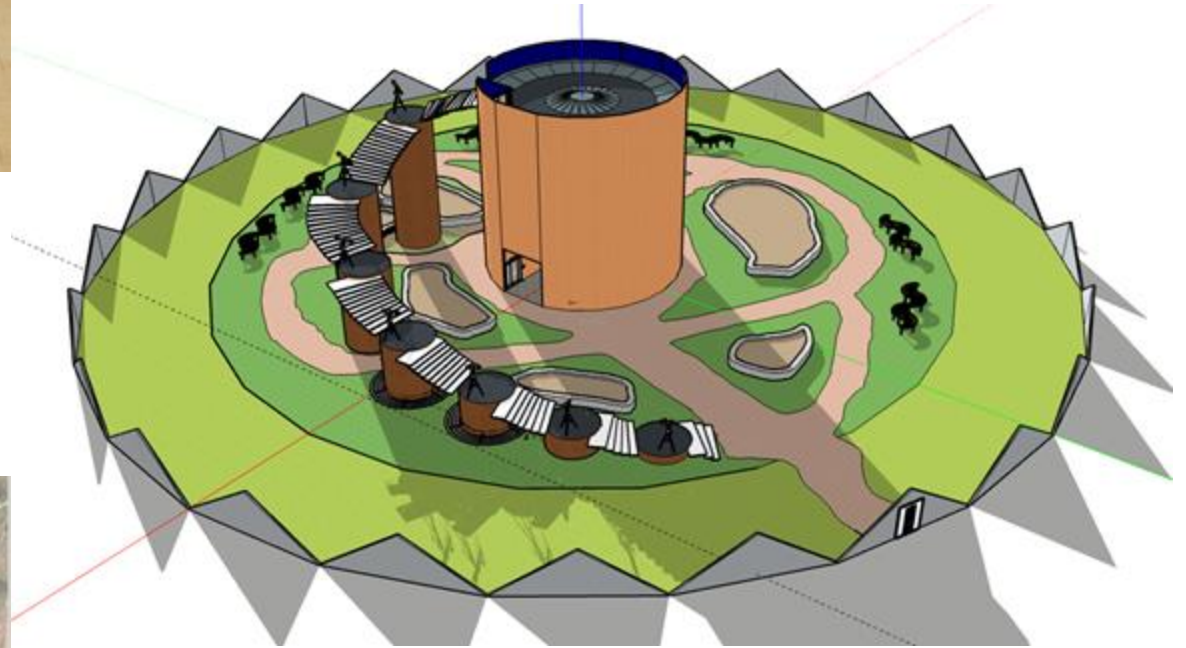
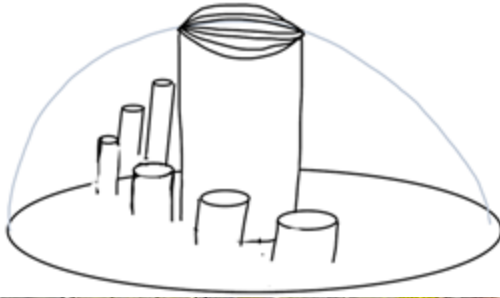
# WORKING WITH ALL PROFESSIONS

- Simulating a real project team with Architecture, Engineering, and Construction professionals
- Opportunity to explore all disciplines
- Looking at a project from all angles; owner, city, design team, construction team
- Trying new methods of communication; CAD, drawings, physical and digital models





# TEAM DESIGN PROJECT



# TEAM DESIGN PROJECT



# TEAM DESIGN PROJECT

## REMINGTON PARK



The Remington Arms Factory in Bridgeport started in 1867 when the Union Metallic Cartridge Company in the east end of Bridgeport, started to make guns for the union during the civil war. Later was purchased by Remington Arms in 1915, who expanded the factory to a 73-acre manufacturing factory, and also made bombs and ammo for the allied forces in WW2. In 1942 there was an explosion that wreck one side of the four story building. The building was closed in 1988.



Timeline	Q1			Q2			Q3			Q4		
	January	February	March	April	May	June	July	August	September	October	November	December
Site Preparation	[Bar]			[Bar]			[Bar]			[Bar]		
Superstructure	[Bar]			[Bar]			[Bar]			[Bar]		
Exterior Envelope	[Bar]			[Bar]			[Bar]			[Bar]		
Mechanical (HVAC, Plumbing, Electrical)	[Bar]			[Bar]			[Bar]			[Bar]		
Interior Design	[Bar]			[Bar]			[Bar]			[Bar]		
Landscaping	[Bar]			[Bar]			[Bar]			[Bar]		



### CONCEPTUAL SCHEDULE

Materials	Cost per Unit	Factor	Total
Concrete	\$1.50 per ft	3,444	\$5,166
Marble	\$9.50 per ft	2,500	\$23,750
Grass	\$.80 per ft	570,000	\$456,000
Glass	\$756 per 5x7 window	100	\$75,600
Remediation	\$12,000 per acre	73	\$2,336,000
Reno	\$300 per ft	21,715	\$6,514,500
Total:			\$9.5 million

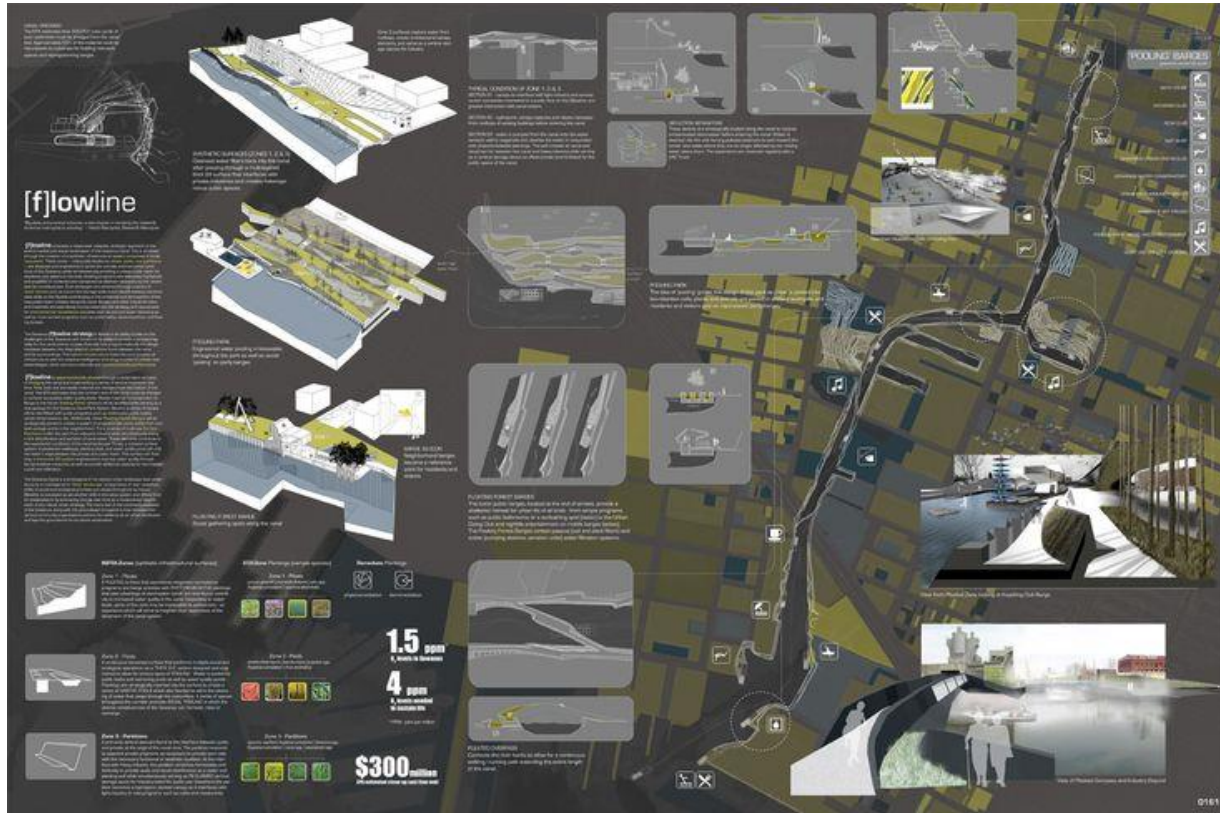
### PROJECT COMPLETE!



### CONCEPTUAL ESTIMATE



# TEAM DESIGN PROJECT



# WHY JOIN ACE?

- Find your Passion!
- Experience Construction Professions BEFORE College
- Mentorship from Skilled Professionals
- Develop New Skills
- Qualify for Scholarships
- Have Fun!





# WHAT'S THIS GOING TO COST?

ACE Mentorship Program  
is **FREE** to students.

- Professionals are Volunteers
- Hospitality and Supplies are donated by participating Firms
- Schools and Firms coordinate to provide parking & bus vouchers when required.

**\$0**





02

# Session Structure

# SESSION STRUCTURE

- Weekly or Bi-weekly sessions on Tuesdays, Wednesdays, or Thursdays
- Hosted at Professionals' Offices
- Sessions will occur October through February or May





# PRESENTATIONS

## Career Topics

Construction Management

Architecture

Structural Engineering

Mechanical & Plumbing Engineering

Electrical & Technology Engineering

Civil Engineering & Site Analysis

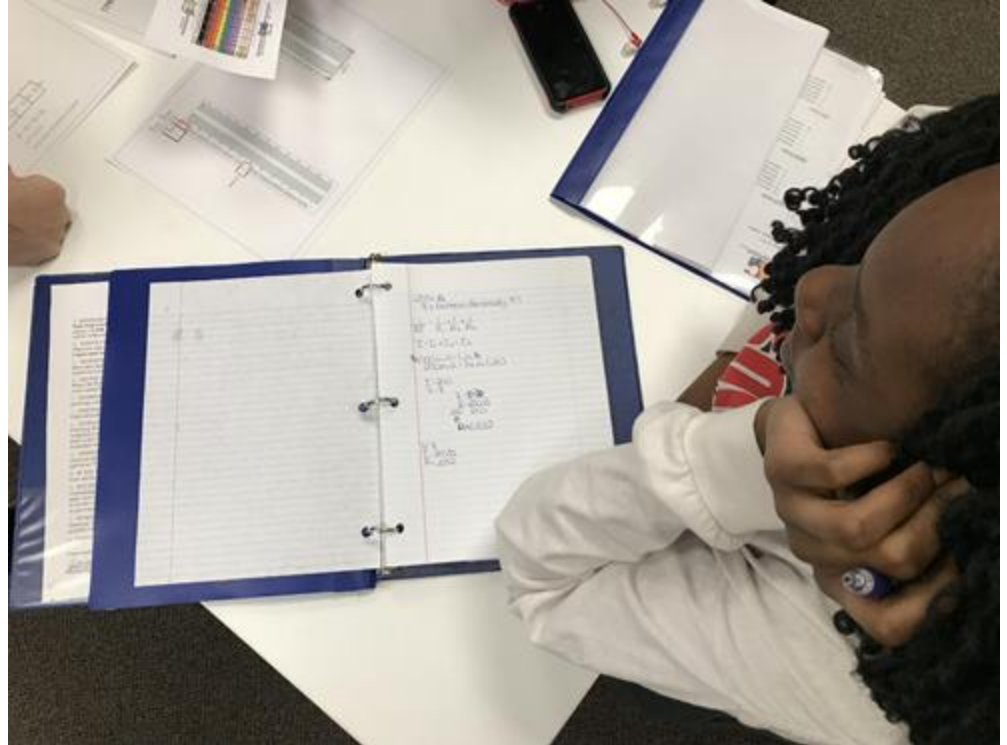
Landscape Design



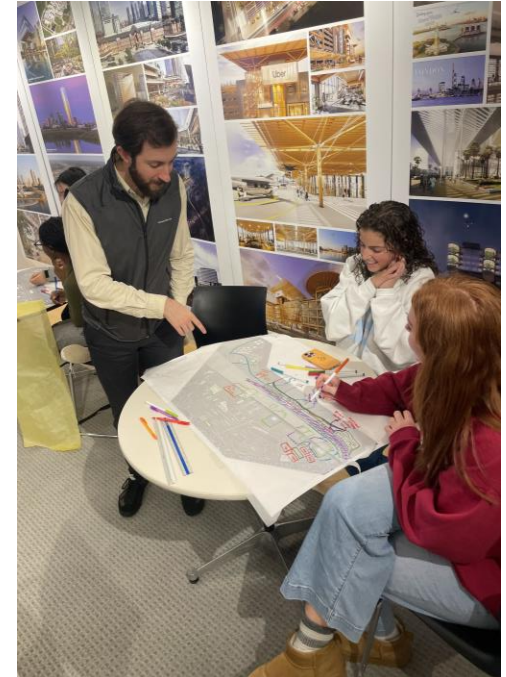
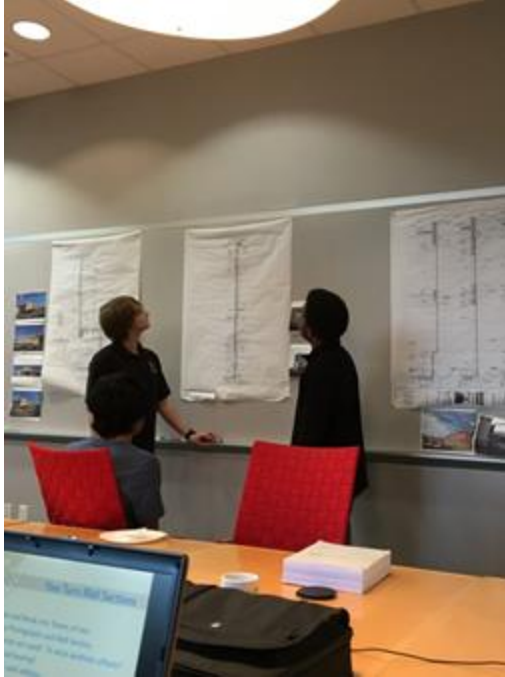
# HANDS-ON ACTIVITIES

## In All Disciplines!

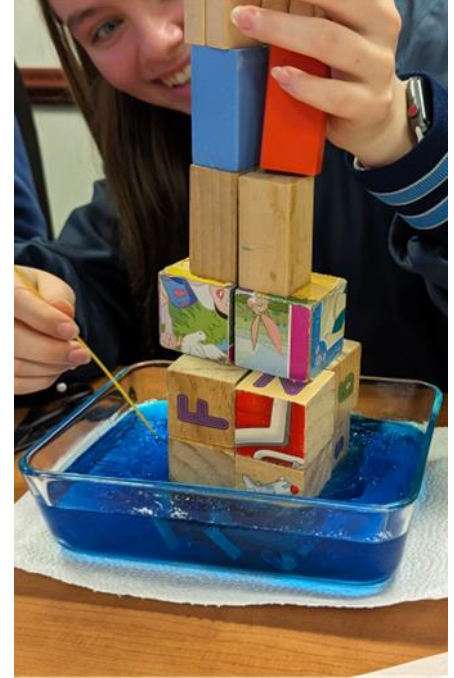
- Intro to design / drawing
- Programming & research
- Visual expression of ideas
- Design structure and interiors
- Support design with Engineering
- Career topic-based activities
- Construction Planning



# ARCHITECTURE ACTIVITIES



# ENGINEERING ACTIVITIES



# CONSTRUCTION ACTIVITIES



# STUDENT PROJECT

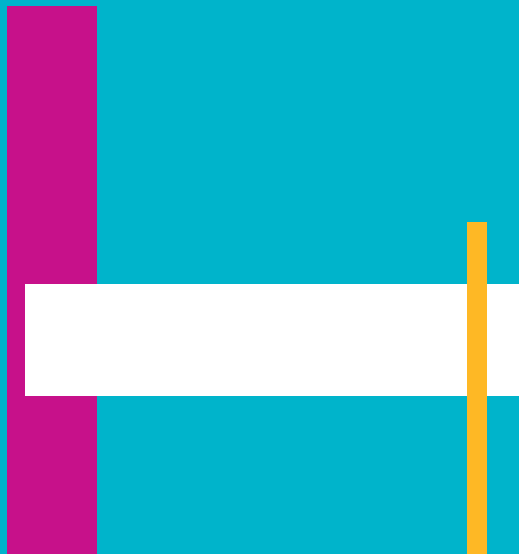
## DESIGN A PROJECT WITH YOUR TEAM!

- The Design Project is different for each chapter
- Collaborate on A/E/C design and present to your team
- Specialize your role on the team for your interests
- Present your work as a team at the end of the program
- Submit to the ACE National competition (Optional)



03

# Alumni + Mentor Spotlight



# Alumni Spotlight – Recent Scholarships



**Alex Nguyen**

Stratford High School

National Scholarship &  
Murray Merl Scholarship

University of Connecticut  
Major: Civil Engineering  
Minor: Construction Engineering &  
Management



**Taylor Henry**

Granby Memorial High School

ACE CT Scholarship

College: U of Michigan, Ann Arbor  
Major: Mechanical Engineering



**Matthew Lawton**

Avon High School

ACE CT Scholarship

College: Syracuse University  
Major: Architecture



**Ann Pakhayev**

New Canaan High School

CMiC Allen Berg Memorial  
Scholarship, Murray Merl  
Scholarship

College: Cornell University  
Major: Architecture



# Alumni Spotlight - Succeeding in College



**Emily Fazzina**

Wethersfield High School

Murray Merl Scholarship

College: Roger Williams University  
Major: Construction Management



**Sushil Menon**

Glastonbury High School

ACE CT Scholarship

College: Roger Williams University  
Major: Architecture



**Noah Klim**

East Catholic High School

ACE CT Scholarship

College: Quinnipiac University  
Major: Civil Engineering



**Christina Marcellus**

Stratford High School

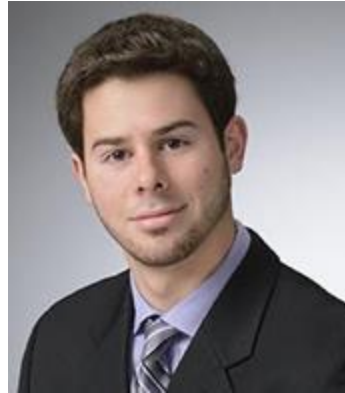
ACE CT Scholarship

College: University of New Haven  
Major: Mechanical Engineering

# Alumni Spotlight - Returning as Mentors



**Emily Ruggeri**  
Project Engineer  
Turner Construction  
Director, ACE Greater  
Bridgeport Chapter  
Cornell University  
Major: Civil Engineering



**Timothy Griffing, EIT**  
Senior Civil Project Engineer  
Loureiro Engineering  
Associates, Inc.  
ACE Greater Bridgeport  
Chapter mentor  
University of New Haven  
Major: Civil Engineering



**Amanda Lamontagne  
Maron, AIA, NCARB**  
Director, DC Office  
Svigals + Partners  
Former ACE New Haven  
Roger Williams University  
Major: Architecture



**Jesus Amado**  
Structural Engineer  
Pratt & Whitney  
ACE Middletown Mentor  
University of New Haven  
Major: Mechanical Engineering

# ACE Mentor CT Firms & Supporters





04

Next Steps  
Questions?  
Use the Chat Feature



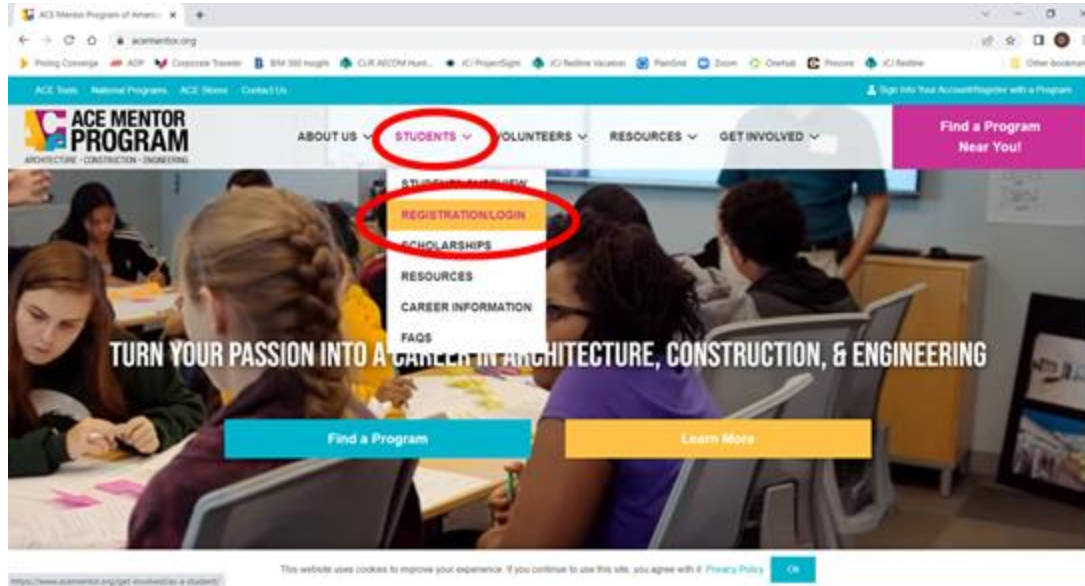
# Next Steps

- ☑ Register Today! [www.acementor.org](http://www.acementor.org)
- ☑ Complete the Parent Consent Form
- ☑ Mark Your Calendar: Oct. 15, 16, or 24

Questions? Use the Chat Feature



# Register at [www.acementor.org](http://www.acementor.org)



## Questions? Use the Chat Feature



# Class schedules 2024-2025

## Hartford at JCJ Architecture

120 Huyshope Ave, Suite 400, Hartford  
Every week, October through February  
Tuesdays from 4:00 pm to 6:00pm  
First Class: 10/15/2024

## Bloomfield at Salas O'Brien (BVH)

206 West Newberry Road, Bloomfield  
Every other week, October through May  
Wednesdays from 4:00 pm to 6:00pm  
First Class: 10/16/2024

## Hartford at Tecton Architects

34 Sequassen Street, Suite 200, Hartford  
Every week, October through February  
Wednesdays from 4:00 pm to 6:00pm  
First Class: 10/16/2024

## Middletown At Tighe & Bond

213 Court Street, #1100, Middletown  
Every other week, October through May  
Wednesdays from 4:00 pm to 6:00pm  
First Class: 10/16/2024

**Questions? Use the Chat Feature**





# Class schedules 2024-2025

## New Haven at Pickard Chilton

980 Chapel Street, New Haven  
Every week, October through April  
Wednesdays from 5:00 pm to 6:30pm  
First Class: 10/16/2024

## New Britain at Kaestle Boos Associates

416 Slater Road, New Britain  
Every week, October through March  
Tuesdays from 4:00 pm to 6:00pm  
First Class: 10/15/2024

## Bridgeport

at Wakeman Boys & Girls Club Madison Ave

595 Madison Ave, Bridgeport  
Every other week, October through May  
Thursdays from 4:30 pm to 6:00pm  
Application Deadline: 10/10/2024  
First Class: 10/24/2024

**Questions? Use the Chat Feature**





Thank you!



Questions? Use the Chat Feature

