

# ACE MENTOR PROGRAM OF ROCHESTER PLAYHOUSE SYLLABUS 2021 – 2022



Date	Locations & Descriptions
<b>Thursday, September 9</b> 6:00 pm – 7:00 pm <b>Mentors Optional</b>	<b>Student Open House</b> (The Pike Co., 1 Circle Street, Rochester, NY 14607) <ul style="list-style-type: none"> <li>• Overview of program and expectations</li> <li>• Parents welcome to attend</li> </ul>
<b>Thursday, September 16</b>	<b>Student application deadline</b> ( <a href="http://www.acementor.org">www.acementor.org</a> )
<b>Thursday, September 23</b>	<b>Notification sent to all applicants via email</b>
<b>Thursday, October 7</b> 4:30 pm - 6:30 pm	<b>Meeting #1 – Introduction &amp; Scavenger Hunt</b> – (LeChase Construction, 205 Indigo Creek Drive, Rochester, NY 14626) <ul style="list-style-type: none"> <li>• Introduction to the ACE Mentor Program                             <ul style="list-style-type: none"> <li>○ Expectations &amp; syllabus review</li> <li>○ Google Classroom overview</li> <li>○ Meet the mentors</li> <li>○ Architectural scavenger hunt</li> <li>○ <b>Collect shirt and shoe size (steel toe boots will be provided to all students)</b></li> </ul> </li> </ul> <p><b>Assignment: Get permission form signed.</b></p>
<b>Thursday, October 14</b> 4:30 pm - 6:30 pm	<b>Meeting #2 - Understanding Construction Drawings</b> - (Bergmann Associates, 280 E. Broad St #200, Rochester, NY 14604) <ul style="list-style-type: none"> <li>• Review a set of construction documents. Locate symbols, find dimensions, determine square footages &amp; materials, etc.                             <ul style="list-style-type: none"> <li>○ Floor Plans, elevations, sections</li> <li>○ Available tools to create construction drawings</li> </ul> </li> <li>• Begin playhouse project                             <ul style="list-style-type: none"> <li>○ Brief presentation on concept/idea/diagram</li> </ul> </li> </ul> <p><b>Assignment: Brainstorm a theme/concept for your playhouse. Bring inspiration images next class.</b></p>
<b>Thursday, October 21</b> 4:30pm – 7:30pm <b>Mentors Optional</b>	<b>Meeting #3 – Leadership Training</b> (Bergmann Associates, 280 E. Broad St #200, Rochester, NY 14604) <ul style="list-style-type: none"> <li>• Learn about various leadership styles, including your own.</li> </ul>
<b>Thursday, October 28</b> 4:30 pm - 6:30 pm	<b>Meeting #4 – Structural Engineering</b> - (LaBella Associates, 300 State Street, Suite 201, Rochester, NY 14614) <ul style="list-style-type: none"> <li>• Presentation &amp; hands-on building contest</li> </ul> <p><b>Assignment: Decide on your group’s playhouse concept. Begin sketching how this concept can translate into design features in plan, section, elevation or 3D.</b></p>
<b>Saturday, October 30</b> 8:00 am – 12:00 pm <b>Mentors Optional</b>	<b>Meeting #5 - Concrete Footing Competition</b> – (The Pike Co., 1 Circle Street, Rochester, NY 14607) <ul style="list-style-type: none"> <li>• Steel toe boots required. Wear clothes that can get dirty.</li> </ul>

# ACE MENTOR PROGRAM OF ROCHESTER PLAYHOUSE SYLLABUS 2021 – 2022



Date	Locations & Descriptions
	<ul style="list-style-type: none"> <li>3 teams will compete to most-accurately construct the formwork for a concrete footing using rebar and formwork.</li> </ul>
<b>Thursday, November 4</b> 4:30 pm -6:30 pm	<p><b>Meeting #6 - Bid Day Experience</b> - (LeChase Construction, 205 Indigo Creek Drive, Rochester, NY 14626)</p> <p>Simulate the bidding process:</p> <ul style="list-style-type: none"> <li>Review drawings for a hypothetical project</li> <li>Contact contractors and get quotes</li> <li>Determine total estimated project cost based on qualified low bidders</li> </ul> <p><b>Assignment: Draw all playhouse drawings to scale.</b></p>
<b>Thursday, November 11</b> 4:30pm – 6:30pm	<p><b>Meeting #7 – 3D Modeling with Revit &amp; Virtual Reality – (RIT)</b></p> <p><b>Assignment: Draw all playhouse drawings to scale.</b></p>
<b>Saturday, November 13</b> 11:00am – 1:00pm <b>Mentors Optional</b>	<p><b>Meeting #8 – RIT Campus Tour – Parents welcome!</b></p>
<b>Thursday, November 18</b> 4:30 pm – 6:30 pm	<p><b>Meeting #9 – Civil Engineering</b> – (Bergmann Associates, 280 E. Broad St #200, Rochester, NY 14604)</p> <ul style="list-style-type: none"> <li>Overview of civil engineering types</li> <li>Specific project examples and job expectations</li> <li>Hands on activities including pipeline design and storm weather modeling</li> </ul> <p><b>Assignment: Draw all playhouse drawings to scale.</b></p>
<b>Thursday, December 2</b> 4:30 pm - 6:30 pm	<p><b>Meeting #10 – Working Class – Playhouse Design</b> (LaBella Associates, 300 State Street, Suite 201, Rochester, NY 14614)</p> <ul style="list-style-type: none"> <li>Bring all work to date (sketches, laptops, anything to be productive)</li> </ul> <p><b>Assignment: Draw all playhouse drawings to scale.</b></p>
<b>Saturday, December 4</b> 8:00 am – 12:00 pm <b>Mentors Optional</b>	<p><b>Meeting #11 – Metal Stud Framing Experience</b> – (Davis Fetch, 175 Dodge St, Rochester, NY 14606)</p> <ul style="list-style-type: none"> <li>Steel toe boots required</li> <li>Build a room from the ground up using metal studs and drywall</li> </ul>
<b>Thursday, December 9</b> 4:30 pm – 6:30 pm	<p><b>Meeting #12 – Estimating / Lego Project Management Game / Working Class</b> – (The Pike Co., 1 Circle St., Rochester, NY 14607 - Entrance is in back of bldg.)</p> <ul style="list-style-type: none"> <li>Introduction to project management</li> <li>Work in groups to continue developing playhouse drawings</li> </ul> <p><b>Assignment: Combine everyone’s playhouse ideas into 1 design. Draw all playhouse drawings to scale.</b></p>

# ACE MENTOR PROGRAM OF ROCHESTER PLAYHOUSE SYLLABUS 2021 – 2022



Date	Locations & Descriptions
Saturday, December 11 8:00 am – 12:00 pm	<p><b>Meeting #13 – Plumbing Experience</b> - (Local 13 Plumbers &amp; Pipefitters Training Center, 1850 Mt Read Blvd, Rochester, NY 14615)</p> <ul style="list-style-type: none"> <li>• Steel toe boots required.</li> <li>• Students will receive hands-on experience welding, brazing pipes, cutting steel with acetylene torches, &amp; soldering copper pipes</li> </ul>
Thursday, December 16 4:30 pm – 6:30 pm	<p><b>Meeting #14 – Playhouse Working Class – Finish Playhouse Design</b> - (LaBella Associates, 300 State Street Suite 201, Rochester, NY 14614)</p> <ul style="list-style-type: none"> <li>• Bring all work to date (sketches, laptops, anything to be productive)</li> <li>• Present playhouse drawings to the group</li> <li>• Utilize time with Mentors to make sure dimensions are correct &amp; materials are labeled.</li> <li>• <b>Playhouse drawings DUE at end of class</b></li> </ul>
Thursday, January 6 4:30 pm - 7:30 pm	<p><b>Meeting #15 – Playhouse Construction Day 1 – Build Day</b> - (Pike, 1 Circle St., Rochester, NY 14607)</p> <ul style="list-style-type: none"> <li>• Steel toe boots required. Wear clothes that can get dirty/painted.</li> </ul>
Thursday, January 13 4:30 pm - 7:30 pm	<p><b>Meeting #16 – Playhouse Construction Day 2 –Build Day</b> - (Pike, 1 Circle St., Rochester, NY 14607)</p> <ul style="list-style-type: none"> <li>• Steel toe boots required. Wear clothes that can get dirty/painted.</li> </ul>
Thursday, January 20 4:30 pm - 7:30 pm	<p><b>Meeting #17 – Playhouse Construction Day 3 – Build Day</b> - (Pike, 1 Circle St., Rochester, NY 14607)</p> <ul style="list-style-type: none"> <li>• Steel toe boots required. Wear clothes that can get dirty/painted.</li> </ul>
Thursday, January 27 4:30 pm – 7:30 pm	<p><b>Meeting #18 – Playhouse Construction Day 4 – Build Day</b> - (Pike, 1 Circle St., Rochester, NY 14607)</p> <ul style="list-style-type: none"> <li>• Steel toe boots required. Wear clothes that can get dirty/painted.</li> </ul>
Saturday, January 29 8:00 am – 12:00 pm	<p><b>Meeting #19 – Electrical Experience</b> – (NECA, 470 West Metro Park, Suite B, Rochester, NY 14623)</p> <ol style="list-style-type: none"> <li>1. Electrical Training</li> </ol>
Thursday, February 3 4:30pm – 6:30pm	<p><b>Meeting #20 – Principles &amp; Elements of Interior Design</b> - (Bergmann Associates, 280 E. Broad St #200, Rochester, NY 14604)</p> <p><b>Assignment: 1500sf house project assigned. Begin developing floor plans.</b></p>
Thursday, February 10 4:30 pm – 6:30 pm	<p><b>Meeting #21 – Working Class - 1500SF House Design</b> – (LaBella Associates, 300 State Street Suite 201, Rochester, NY 14614)</p> <ul style="list-style-type: none"> <li>• Bring all work to date (sketches, laptops, anything to be productive)</li> <li>• Present house designs to the group / receive feedback</li> <li>• Work with mentors on 3D model, plans, sections, elevations, etc.</li> </ul> <p><b>Assignment: Choose site for 1500SF house and continue developing floor plans. Draw site diagrams showing how the house is situated on the site.</b></p>

# ACE MENTOR PROGRAM OF ROCHESTER PLAYHOUSE SYLLABUS 2021 – 2022



**ACE MENTOR PROGRAM**  
ARCHITECTURE • CONSTRUCTION • ENGINEERING

ROCHESTER | NY

Date	Locations & Descriptions
<p><b>Thursday, February 24</b> 4:30 pm – 6:30 pm <b>Mentors Optional</b></p>	<p><b>Meeting #22 –Roofing &amp; Painting</b> – (Upstate Roofing &amp; Painting, 1300 County Rd 85, Rochester, NY 14623)</p> <p><b>Assignment: Develop house floor plans and elevations</b></p>
<p><b>Thursday, March 3</b> 4:30 pm – 6:30 pm</p>	<p><b>Meeting #23 – Marketing &amp; Working Class – House Design</b> - (LaBella Associates, 300 State Street Suite 201, Rochester, NY 14614)</p> <ul style="list-style-type: none"> <li>• Bring all work to date (sketches, laptops, anything to be productive)</li> <li>• Present house designs to the group / receive feedback</li> <li>• Work with mentors on 3D model, plans, sections, elevations, etc.</li> </ul> <p><b>Assignment: Continue to develop house drawings</b></p>
<p><b>Thursday, March 10</b> 4:30 pm – 6:30 pm</p>	<p><b>Meeting #24 – Working Class</b> – (LaBella Associates, 300 State Street Suite 201, Rochester, NY 14614)</p> <ul style="list-style-type: none"> <li>• Bring all work to date (sketches, laptops, anything to be productive)</li> <li>• Present house designs to the group / receive feedback</li> </ul> <p><b>Assignment – Finalize all drawings and materials and presentation boards.</b></p>
<p><b>Thursday, March 17</b> 4:30 pm – 6:30 pm</p>	<p><b>Meeting #25 – Presentation Skills</b> - (SWBR Architects, 387 East Main Street Suite 500, Rochester, NY 14604)</p> <ol style="list-style-type: none"> <li>1. Dry run of presentations with critique by David Beinetti</li> </ol> <p><b>Assignment: Make note cards (optional), practice, practice, practice!</b></p> <p style="text-align: center;"><b>FINAL HOUSE DESIGNS ARE DUE</b></p>
<p><b>Friday, March 25</b> 4:00pm - 7:00pm</p>	<p style="text-align: center;"><b>FINAL PRESENTATIONS / GRADUATION AT RIT</b></p> <ul style="list-style-type: none"> <li>• Hors d’oeuvres, networking</li> <li>• Student presentations</li> <li>• Presentation of graduation certificates, tool vouchers, and scholarships</li> </ul>