



Week 1 – Introduction to ACE

Meeting Date: January 14, 2010

Speaker: John Derucki

Deliverables: N/A

- Overview of the ACE Program
 - o Goals for this affiliate
- Introductions
 - o Students – School year, clubs involved in, hobbies & interests, college of choice
 - o Mentors – Company & position, college(s) attended & degree(s) obtained, what drew them to their field, hobbies & interests
- Program Outline
 - o Delivery of schedule
 - o Weekly expectations & deliverables
- Establish Teams
- Award for Best Proposal

Week 2 – Owner & Operator

Meeting Date: January 28, 2010

Speaker: Aaron Weil

Deliverables: Parent Consent Forms

- Market Studies
 - o Determine needs and competition
 - o Determine potential buyers and revenue sources
 - o Project sales
- Building Programming & Plotting
 - o Determine rough location of building on site
 - o Size and orientation of building
 - o Building Access
- Proforma
 - o Revenue vs. Cost
 - o Is construction financially feasible?

Week 3 – Civil Engineering & Landscape Architecture – Site Surveys, Excavation, & Site Utilities

Meeting Date: February 11, 2010

Speaker: Mitch Paulk & J. Alan Neal

Deliverables: Programmed Plan

- Site Survey
 - o Determining benchmarks
 - o Topographic mapping
 - o Surveying – Total Station



- Excavation
 - o Large excavation projects
 - o Typical excavation equipment
 - o Cut vs. Fill sites
- Site Utilities
 - o Review Site Utility plan
 - o Types of piping

Week 4 – Structural Engineering – Concrete, Foundations, Framing, & Masonry

Meeting Date: February 25, 2010

Speaker: Mitch Paulk

Deliverables: Site plan

- Types of Foundations
 - o Piers
 - o Foundation walls
 - o Footings – Spread and Continuous
- Wood vs. Steel
- Types of Masonry
 - o Structural vs. Architectural masonry

Week 5 – Architecture

Meeting Date: March 11, 2010

Speaker: Ed Seiber

Deliverables: Foundation Plan & Structural Layout

- Introduction to Architecture
- Floor Plans vs. Elevations
- Sections & Details

Week 6 – Mechanical, Electrical, and Plumbing Engineering

Meeting Date: March 25, 2010

Speaker: Gary Holder

Deliverables: Floor Plan and Elevations

- HVAC
 - o Types of systems (split, rooftop, chilled water, etc.)
 - o Mechanical design & load calculations
- Plumbing
 - o Plumbing design (riser diagrams)
 - o Domestic water flow calculations
 - o Piping products



- Electrical
 - o Service types
 - o Circuitry

Week 7 – Sustainable Design

Meeting Date: April 8, 2010

Speaker: Dan Prows

Deliverables: MEP Plans – Including riser diagrams

- LEED
 - o Discuss local LEED buildings
 - o Review checklist & Grading scale
- Other green scoring systems
- Government incentives to go green

Week 8 – Preconstruction, Value Engineering, & Scheduling

Meeting Date: April 22, 2010

Speaker: Heather Tuskowski

Deliverables: LEED Checklist

- Cost estimating
 - o Cost codes
 - o Negotiated vs. Hard Bid work
- Value Engineering
 - o Techniques
- Scheduling

Week 9 – Contracting

Meeting Date: May 6, 2009

Speaker: Derucki Construction

Deliverables: Cost Estimate & Schedule

- Construction process
- Submittals, RFI's, etc.
- Cost management
- Mock bid day



Week 10 – Final Presentations

Meeting Date: May 13 or 20, 2010

Speaker: N/A

Deliverables: Presentation Materials

- Student deliver final presentations for mentors, parents, school officials, and guests
- Panel determined at a later date will critique, ask questions, etc.