ABOUT THE TEAM

» Charged with designing and constructing a new canoe out of concrete.

» Competes in a regional competition against 15 college teams.

» Follows rules set by the American Society of Civil Engineers (ASCE).

ABOUT THE MEMBERS

» Historically, 12-15 team members.

» Mainly civil engineering students, with students from several other majors participating.

TIMELINE

FALL
DESIGN

» Formulate several potential concrete-mix designs.

» Test designs in compression and choose concrete that floats and is durable.

» Use 2-D and 3-D computer programs to design the shape of the canoe.

» Perform structural analysis to identify the best design.

» Write paper detailing the techniques used to design and fabricate the canoe.

» Provide judges with the team breakdown and cost analysis of canoe construction.

WINTER + SPRING
CONSTRUCT

» Create canoe mold by printing and cutting out cross sections of molded canoe design, sand down until smooth and add joint compound to fill in low spots and tape as a releasing agent.

» Pour concrete over the mold and cure in a moist environment for 28 days, sand concrete and apply sealant coat and team name.

» Build a display stand and table display.

SPRING
COMPETE

» Compete in team competition, which includes a design report, canoe display and several co- and single-sex in-water races, such as a sprint and an endurance race.