

Group Project Ideas

Name _____

Discipline: Civil general _____ Structural _____ Geotech _____ Transportation _____ Environ _____

Put a 1 for first choice, 2 for second, 3 for third, 4 for fourth and 5 for fifth choice.

- _____ structural cost analysis - new mall, I-235 Des Moines project
- _____ geothermal insulation
- _____ power plant pollution control alternatives
- _____ bridges - environmental aspects, animals, water ways, life expectancy, structural deficiencies
- _____ water systems/water purification system
- _____ evaluation of alternative energies (bioethanol, biodiesel, wind, solar)
- _____ retaining walls
- _____ effectiveness of tolls on highways
- _____ high speed transportation system
- _____ cost of education and time to pay off debt, estimate how big your paycheck is going to be in 15 years
- _____ evaluating the cost of road maintenance
- _____ environmental concerns through the effects that roads and bridges cause to surroundings
- _____ the cost of materials used for a building
- _____ sports stadium structure
- _____ benefit/cost of removing OWI related facilities from Iowa roadways
- _____ railroad construction versus road construction
- _____ mountain tunneling
- _____ culvert design
- _____ concrete and road material mixing
- _____ bridge repair
- _____ how to establish pollution laws/regulations
- _____ appropriate water well/ hand pump technology for developing countries

Big Project ideas (see: http://www.icivilengineer.com/Big_Project_Watch/):

- _____ Big Dig (Central Artery/Tunnel Project): Big Dig is the largest single civil construction project ever undertaken in the US.
- _____ Central Japan International Airport: Central Japan International Airport is an offshore airport. When completed, it will be the third largest airport in Japan.
- _____ China River Diversion: The river diversion mega-project is the largest ever planned.
- _____ Melbourne City Link: This Urban Tolly is the biggest infrastructure project in Australia.
- _____ Channel Tunnel Rail Link: The UK's biggest civil engineering projet.
- _____ Egnatia Highway: This project is a 680 kilometres highway with 11.25 km of tunnels and 105 bridges.
- _____ US 82 Greenville Bridge: The bridge with the main span of 1378 feet/420 meters will be the longest cable stayed span in the United States.
- _____ Heathrow Terminal Airport Expansion (Terminal 5): New airport terminal building.
- _____ Strait of Messina Bridge Project: The bridge will link the island of Sicily and the Italian mainland. When completed, it would be the longest suspension bridge ever built.
- _____ Pisa Tower Restoration: The leaning Tower of Pisa, closed for repairs for more than 10 years, costs \$25 million in restoration.
- _____ Rion-Antirion Bridge: It will be the longest cable-stayed bridge in the world.
- _____ West Coast Router Modernization(UK): Upgrading the West Coast rail line linking London and Edinburgh in Scotland.
- _____ Singapore Deep Sewerage Station: Deep tunnel sewerage system consists of 90 km of deep tunnels and 170 km of link sewers and two treatment plants.
- _____ South Valley Development Project (Toshka & East Oweinat): South Valley Development Project is one of the world s biggest irrigation pumping stations which will drive water into the desert for one of the most ambitious, comprehensive desert reclamation projects ever.
- _____ The Three Gorges Dam: When completed, the Three Gorges Dam on the Yangtze River will be the largest hydroelectric dam in the world.
- _____ T-REX project: I-25 freeway reconstruction and light-rail extension project undertaken in Denver, Colorado.
- _____ Venice Tide Barrier Project (The Modulo Sperimentale Elettromeccanico project): The project designed to protect Venice from flooding and erosion involves using a string of 79 inflatable gates to stem the flow of water through Venice's three inlets into its lagoon.
- _____ Yucca Mountain Nuclear Waste Repository Project: The purpose of the Yucca Mountain Site Characterization Project is to determine if Yucca Mountain, Nevada, is a suitable site for a spent nuclear fuel and high-level radioactive waste repository.