Friday, December 4, 2015

ENGINEERING CLUB – BUTTE COLLEGE

It is with great honor that I would like to announce the rebirth of the Engineering Club at Butte College. The Profession of an Engineer is what makes our lives better every day. The code of Ethics for Engineers should always be our reference that guide our actions and initiatives.

Premise: Engineering is a word that embraces many different fields and there is a continuous evolution of denomination and labels. However, the development of an idea into a real solution for a real need or a real problem, is the job or the Engineer, regardless of the type of Engineering field he or she is part of.

Therefore, the list of ideas below is not made in any particular way referred to a specific type of engineering. Instead, I would like to promote a more comprehensive approach to problem solving, in which a group of growing professionals (YOU) work together utilizing your expertise, your passion and determination, to find sustainable and long lasting solutions for the general good of humanity and of the world.

I hope that these ideas will provide inspiration for your projects and hopefully for your future careers. This is only my contribution to starting the club, but obviously, YOUR ideas are welcome, ALWAYS.

1. Design, fabrication and testing of low-impact **wind turbines** (especially with vertical axis) for low power generation (500W-1000W)
2. Design, synthesis and characterization of **aerogels**.
3. Design, fabrication and testing of a **Stirling Engine**, also in combination of aerogel-covered hot source.
4. Design, fabrication and programming and testing of **robots and machines using Arduino Boards. (opportunity of collaboration with the Mechatronic Club).**
5. Design, synthesis and characterization of **composite materials**, especially utilizing low cost or recycled materials.
6. **Design of a bridge** at Butte College that crosses one of the creeks. This project requires Surveying the area of interest, then using CIVIL 3D software for the design.
7. Design, fabrication of high performance low emission vehicle.
8. Design and fabrication of a sun-chaser device in order to obtain better efficiency with solar panels.
9. Participation in the B-WELL project at Butte College regarding the filtration of the rain water from the parking lot going to the creek.
10. GIS: Learning and applying the theory and devices available at Butte College in order to produce and utilize GIS maps.
11. The Pofression of Engineer and related fields: License and exams.
12. Patents: from ideas to property. Open source and copyright.

I would be honored to be the Advisor of the Engineering Club. There are great opportunities to make our club part of larger engineering communities state and nationwide.

I look forward to meeting you at our meetings next week on Monday, Dec 7 and Tuesday, Dec 8 1:00-2:00 at my office MC 249. - DrM – Francesco Madaro