<u>Dr. Gandhi's AIMS2 Research Project – Fall 2017 & Spring 2018</u> (Applicable to ALL Engineering Majors)

Who is eligible: Running an engineering business involves much more than merely knowing how the technology works. Understanding the involvement of the customer, how to develop a user centric product that would increase chances of the product being successful, as well as understanding the general process of product development, are all skills that make any engineer or computer scientist more competitive. Any AIMS2 student who is interested in knowing how a technical business works, is eligible to work on this project.

Duration: Meetings will be held on a weekly basis and will then continue through the Spring 2018 semester. This research project will involve both face to face meetings as well as virtual meetings via skype that will expose the students to working on virtual teams, which is an absolute necessity in today's workplace. Since this research work will be done during the regular semester, the average workload will be 5-7 hours/week.

<u>Professor's Contact Information:</u> For more information, please feel free to contact Dr. Gandhi at Email: <u>sj.gandhi@csun.edu</u> or call at (818) 677-6157. If there is no answer, please leave a voicemail with your contact details (email or phone #) and I will call you back ASAP.

Research Focus: Opportunity Identification, Developing Customer Awareness, Understanding target markets, user centric experiences, Determining Market Risks and understanding suppliers for Engineering Projects.

DO YOU WANT TO LEAD OR FOLLOW? IF YOU WISH TO BE A LEADER, THEN THINK OF INVESTING YOUR TIME IN CREATING AN ENTREPRENEURIAL MINDSET FOR YOURSELF!!

How does it apply to your major & why is it important?

An Entrepreneurial mindset involves creating a competitive advantage for yourself in an increasingly competitive and changing business environment that engineering firms operate in. The expectations for the engineering graduate of 2020 (which is what YOU will be) has changed considerably. Creativity will become one of the top three skills workers will need. The figure below shows the top 10 job skills that the World Economic Forum has predicted will be needed

by several professions, including engineers!!! Now is the time to start!!!

Top 10 skills

in 2020

- 1. Complex Problem Solving
- 2. Critical Thinking
- 3. Creativity
- 4. People Management
- Coordinating with Others
- 6. Emotional Intelligence
- 7. Judgment and Decision Making
- 8. Service Orientation
- Negotiation
- 10. Cognitive Flexibility

in 2015

- Complex Problem Solving
- 2. Coordinating with Others
- People Management
 Critical Thinking
- 5. Negotiation
- 5. Negotiation
- Quality Control
 Service Orientation
- 8. Judgment and Decision Making
- Active Listening
- Creativity





Source: Future of Jobs Report, World Economic Forum

Goals of this research project:

As part of this research project, The AIMS2 students will be doing research to understand what an entrepreneurial mindset is in an industry of their choice and how to go about creating that mindset. This will include **Opportunity Identification**, **Developing Customer Awareness**, **Determining Market Risks and obtaining funding for Engineering Projects to start and operate.** Without these key initiatives, most industries would not be profitable because for any project you work on, you need to be aware of who your customer is and what their needs are ---- otherwise no one will be interested in buying your product or technology that you have spent so much time and effort working on.

So, come and spend part of your time this 2017-18 academic year, working on research projects that will enhance your marketability when you look for an internship or a job and learn the skills that are vital to your employment in the 21st century. Flexible working hours and the opportunity to work remotely as long as you check in with the professor about your progress on a weekly basis.