Welcome Note

Vamegh Rasouli, Interim Director

On behalf of the board members of the Jodsaas Center (JC) it is our pleasure to announce the first issue of the JC’s quarterly newsletter. The aim of this newsletter is to update our readers, in particular UND students, on the new progress and developments of the center and receive feedback to improve the services that the center can provide in line with its mission.

The Jodsaas Center for Engineering Leadership and Entrepreneurship was made possible by a generous gift from UND School of Engineering and Mines Alum, Larry Jodsaas, Bachelor of Science in Electrical Engineering, 1962.

The mission of the center includes:
1. Develop the leadership and entrepreneurship skills of our students,
2. Promote the formation and development of student-led entrepreneurial ventures, and
3. Serve as the link between the School of Engineering and Mines and other established programs on campus, including the Center for Innovation and the Entrepreneurship Program within the College of Business.

The activities of the center includes academic programming, outreach activities and hands-on learning experiences. The Grand Challenge Scholars Program (GCSP) and the BIG ideas gym (BIG) are activities which are currently operating under JC.

We look forward to receiving your feedback and suggestions to achieve the missions of the JC through various type of activities.

The Big Challenge (BIG Idea Gym)

The BIG Challenge is an extracurricular activity for students to explore and practice working as team on Big Ideas – ideas that are creative, collaborative, original, and impactful. Students form interdisciplinary teams work in the Big ideas Gymnasium to brainstorm ideas and develop their best idea to pitch to a panel of judges and the audience. The BIG Challenge is an idea-only stage design, and the winners will be given the opportunity to further develop their idea into an engineering design and prototype. This challenge is sponsored by ND Assistive and the Larson Foundation.

Distill Nation wins final engineering challenge, delivering a viable project to purify water more cheaply.
Drillbotic’s Project

The Society of Petroleum Engineers (SPE) runs the Drillbotics competition each year. The aim of the project is to design a rig and related equipment to autonomously drill a vertical well as quickly as possible, while maintaining borehole quality and integrity of the drilling rig and drillstring. The team from each University consists of 5 students and if their design is approved, they will proceed with the manufacturing of the rig. The project has several requirements to be met, including the budget limit of $10,000. This year a group of 12 including Mechanical, Petroleum and Electrical Engineering students involved in this project. The design phase ends by end of Fall 17. We wish good luck for the team to move to the second phase.

Grand Challenge Scholars Program (GCSP)

The GCSP is a 3-year, scholarship based program designed to educate a new generation of engineers to take on some of the most pressing issues facing society today by solving one of the 14 Grand Challenges including enhance virtual reality, secure cyberspace, and develop carbon sequestration methods. UND’s College of Engineering and Mine’s Grand Challenge Scholars Program is fully endorsed by the National Academy of Engineering (NAE).

Students will build a portfolio of achievements with the guidance of professors and business sponsors, encompassing 5 components of hands-on project/research experience; interdisciplinary curriculum, entrepreneurship & commercialization, global experience and service learning.

The KNIFES (Key Nutritional Intake Feedback System) project was selected as the finalist in the NAE Grand Challenges in the category of Health Informatics & presented in Washington D.C. as one of the top 12 teams in USA in April 2017. Team members from left: Eric Horton, Jeffrey Gendreau, Joseph Aymond, and Tyler Kast.

New Engineering Courses

New Eng 410 and other leadership and Entrepreneurship focused courses will be offered to all UG and grad students from Spring 2018 with business development related topics. External industry presenters with experiences in establishing small and large scale business will be invited to teach a wide range of topics and share their success and failure stories with students.

Industry Seminar Series

A series of continuing monthly industry talk are planned to start from Oct 17 to cover a wide range of leadership and entrepreneurship topics.

Upcoming Events

1. September 27, 2017: The first public presentation of the drillbotics team.
4. Dec 2017: Present the results of the design Phase of the drillbotics project.