

GRAND CHALLENGE SCHOLARS

The National Academy of Engineering (NAE) identified **14 Grand Challenges for Engineering** in the 21st Century. The challenges represent matters affecting quality of life, and address larger issues related to **security, health, and sustainability**.

In March 2018, SMU joined over 70 engineering schools to support the NAE's Grand Challenges Scholars Program.

By tackling a Grand Challenge, student scholars will learn to solve problems through investigation, technical inquiry and develop an understanding of the scientific process. Student's research is enriched through multi-disciplinary study and engagement with industry and the global community.

Each challenge falls into one of these **4 categories**:



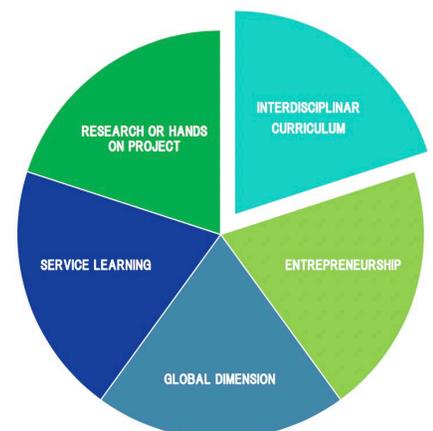
The **14 challenges** are the following:



HELP STUDENTS DESIGN & CONDUCT UNIQUE RESEARCH

Students work closely with SMU faculty to implement a research portfolio while an industry mentor assists with identifying appropriate internships, volunteer opportunities and entrepreneurial activities.

Upon **completion of their Grand Challenge Portfolio**, students qualify to **graduate with distinction** and receive recognition from the National Academy of Engineering.



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Scholars along with the guidance of a faculty research advisor, an Industry Mentor, will design and complete research around one of the Grand Challenges and compile a portfolio over the course of their undergraduate career.

GCS REQUIREMENTS TO APPLY

- Have a minimum of 50 credit hours remaining in degree plan
- Student must be in good academic and conduct standing
- Must be disciplined, proactive and have scientific curiosity
- Students must be willing to dedicate a large portion of their time to working on their Grand Challenges Portfolio
- Applications will be due **early in October**

GCS REQUIREMENTS TO COMPLETE PORTFOLIO

- Enroll in a KNW class, a community engagement class, nine hours of broadening courses, one entrepreneurship class, and one globally focused class
- Attend Grand Challenges seminar series and an entrepreneurship seminar
- Participate in service learning or go abroad for class/work
- One semester internship/co-op at a start-up or start a new venture
- Complete two service-learning activities
- Complete Grand Challenge research project and present to an audience

RESOURCES AVAILABLE TO GCS

- Advisors
 - Faculty research advisor
 - Grand Challenges Industry Mentor
- Hart Center for Engineering Leadership
 - Knowledgeable staff
 - Networking opportunities
- Research Funding up to \$2,000
- Fully funded trips to D.C and abroad
- Access to the Scholars' Den

Grand Challenge Scholars also have exclusive access to **Speaker Series** with industry guest speakers and **Student Seminars!**

For questions or concerns contact:

khubbard@smu.edu

214-768-3033