

NATIONAL YOUTH LEADERSHIP FORUM: ENGINEERING

*2020 Sample Schedule**

Day One: Arrival of Scholars and Program Welcome

Campus Tours and Orientation

Program Welcome and Schedule Overview

Introduction of Capstone Impact Challenge and Goal Setting

Day Two: The Engineering Design Process

3D Printing Workshop: Rocket Design and Printing

Keynote Speaker: Engineering in the 21st Century

Capstone Impact Challenge Workshops

Engineering Design Process

Defining Project Goals and Brainstorming Solutions

Building Leadership Presence Workshop Series: Communication,

Collaboration, and Time Management

Day Three: Engineering Applications

University Admissions Information Session

Helicopter Electronics Workshop: Circuit Design and Programming

Engineering Practical Workshop: Design and Programming

Student Panel and Discussion

Engineering Exploration Lab

Day Four: Design and Build

Building Leadership Presence Workshop Series: Ethics in Engineering

Capstone Impact Challenge Workshops

Ideating Solutions

Testing Prototypes

Engineering Exploration Lab

**This sample schedule is provided as an example of the overall quality and scope of the experience offered and is not intended to represent a specific schedule for 2020. The 2020 specific schedule, locations, speakers, and site visits may be modified.*

Day Five: Engineering Project Management

Capstone Impact Challenge Workshops

Testing Solutions

Engineering Exploration Lab

Off-Site Excursion: Explore Host Campus and Host City

Day Six: Explore Careers in Engineering

Career Immersion Experience

Engineering Firm

Capstone Impact Challenge Workshops

Final Design and Build

Presentation Preparation Practice and Feedback

Building Leadership Presence Workshop Series: Resume Building and
Career Preparation

Engineering Exploration Lab

Day Seven: Engineering the Future

Capstone Impact Challenge Final Presentations and Showcase

Closing Celebration

Finalize Maker Documentary

Day Eight: Farewell and Departure of Scholars

Program Debrief and Closing Address

Student Assessments and Feedback Sessions

Student Certificate and Photo Distribution

Student Travel and Departure Assistance