## NATIONAL YOUTH LEADERSHIP FORUM: ENGINEERING & TECHNOLOGY

# 2018 Sample Schedule\*

Day One: Arrival of Scholars and Program Welcome

Campus Tours and Orientation

Keynote Speaker: Defining Engineering and Technology

Introduction to Project Team and Program

Day Two: The Engineering Design Process

Simulation: Introduction to Impact Challenge Capstone Projects

Case Studies – 21<sup>st</sup> Century Challenges Critical Analysis – Cause Selection

Design Think a Solution

Maker Center: Complete Level I Challenge

Day Three: College Options and Selection

Hot Topics Lecture Series: Engineering Health and Wellness

Workshop: Introduction to 3D Design

Simulation: Capstone Project Development

3D Prototyping a Solution

Begin to Build

Maker Center: Start Level II Challenge or Complete New Level I

Challenge

Day Four: Design and Build

Hot Topics Lecture Series: 21st Century Infrastructure

Simulation: Capstone Project Development

Finalize Prototype Build

Product Modelling/Lean Startup

Business Model Canvas Productizing the Idea

Offsite Excursion: Historical and Cultural Exploration of Host City

<sup>\*</sup>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 2018. The 2018 specific schedule, locations, speakers, and site visits may be modified.

#### Day Five: Engineering Applications

Hot Topics Lecture Series: The New Space Race

Simulation: Capstone Project Development

Crowdsourcing Feedback

Helicopter Electronics Workshop: Circuit Design and Programming Maker Center: Continue Level II Challenge or Complete New Level I

Challenge

#### Day Six: Engineering Project Management

Hot Topics Lecture Series: Automation Nation

Workshop: Surviving e-School

Simulation: Capstone Project Development

Summarize Crowd Feedback Finalize Product Presentation

Maker Center: Complete Level II Challenge or Complete New Level I

Challenge

#### Day Seven: Engineering the Future

Capstone Presentation Preparation Change Agent Fair

Networking Dinner

Capstone Project Showcase

Closing Celebration Social Event

### Day Eight: Farewell and Departure of Scholars

Closing Session: Program Debrief and Award Announcements

Closing Address