$\begin{array}{c|c} AUS & American \ University \\ of \ Sharjah \end{array}$

COLLEGE OF ENGINEERING

CHEMICAL & BIOLOGICAL ENGINEERING BOOT CAMP

OPEN TO HIGH SCHOOL STUDENTS IN GRADES 10-12

DECEMBER 18-20, 2023 | 10:00 A.M. - 1:00 P.M.

AMERICAN UNIVERSITY OF SHARJAH CAMPUS

Discover what it's like to work in the exciting fields of chemical and biological engineering through this special three-day boot camp for high school students. At this informative and engaging camp, you will:

- learn more about chemical and biological engineering
- discover the manufacture of products through chemical and biological processes
- enjoy hands-on activities our state-of-the-art chemical and biological engineering laboratories
- enhance your communication and teamwork skills
- make new friends with similar interests
- receive a certificate of attendance
- enjoy an unforgettable campus experience at AUS

DAY 1 | DECEMBER 18 | 10:00 A.M. - 1:00 P.M.

Learn About Chemical and Biological Engineering

Students will:

- perform site visits and become familiar with all the chemical and biological engineering labs and equipment
- observe the demonstrations of pump station and reverse osmosis (RO) desalination unit
- watch short videos related to chemical and biological engineering industries and fields

DAY 2 | DECEMBER 19 | 10:00 A.M. - 1:00 P.M.

Synthesize Chemical and Biological Engineering Products

Students will learn about the raw materials and the processes involved in the production of useful chemical and biological engineering products. Using batch experiments and natural ingredients in the laboratory, students will synthesize products such as soap. Students will also work on the synthesis of hydrogel beads for drug encapsulation and drug release from hydrogel beads. In addition, students will perform experiments related to the adsorption of dyes on activated charcoal.

DAY 3 | DECEMBER 20 | 10:00 A.M. - 1:00 P.M.

More Chemical and Biological Engineering Processes

Students will learn about different industrial processes in addition to hands-on experiments. In particular, students will gain hands-on training on the operation of cooling tower, process controllers, and material testing. Students will also visit the AUS Library.

REGISTER NOW

Seats are limited

Cost: Free of charge, but students will be selected according to their statement of interest and according to our available capacity. **Registration Deadline:** November 26, 2023 To register: Visit <u>www.aus-chebootcamp.com</u> or contact Ms. Aileen Yulay at ayulay@aus.edu; 06 515 2167