# 2018 BOBCAT SUMMER STEM ACADEMY AT UC MERCED



The goal of this summer academy is to stimulate the interest of middle school and high school students in science, technology, engineering, and mathematics (STEM) disciplines and prepare them to pursue higher education.

# MIDDLE SCHOOL SESSIONS

### # 1 Web Development (June 11th - June 15th)

Brought to you by Dr. Angelo Kyrilov's team (School of Engineering at UC Merced) Students will be learning user interface design in html and making that interactive with javascript.

- Times: 9 am to 4pm, one week session
- Pricing: \$100

### # 2 Robotics (June 18th - June 22nd)

Brought to you by Dr. YangQuan Chen's Team (School of Engineering at UC Merced)

Using mBot Ranger robot kits, the students will build one of the 3 building forms: robot tank, three-wheel racing car, and a self-balance car and learn basic mission control programming.

- Times: 9 am to 4pm, one week session
- Pricing: \$100

### # 3 3D Design & Prototyping (June 25th - June 29th)

### Brought to you by Alejandro Gutierrez's team (School of Engineering at UC Merced)

Learn how to use Computer-Aided Design (CAD) to conduct your first engineering project! You will learn how to draft, design, and fabricate a machine using CAD and 3D printing.

- Times: 9 am to 4pm, one week session
- Pricing: \$100

### # 4 CSI: UC Merced (July 9th - July 13th)

### Brought to you by CalTeach and UC Merced Police Department

Come Explore the World of Forensic Science at UC Merced. Students will learn cutting edge crime scene analysis, talk with real Forensic Investigators and explore activities in crime scene investigation, fingerprint analysis and more!

- Times: 9 am to 4pm, one week session
- Pricing: \$100

### # 5 Solar Car Challenge (July 23rd - July 27th)

### Brought to you by CalTeach at UC Merced

Students will be challenged to think creatively in order to design and construct a solar-powered model car, culminating in a race.

- Times: 9 am to 4pm, one week session
- · Pricing: \$100

# HIGH SCHOOL SESSIONS

### # 1 3D Design & Prototyping (June 18th - June 22nd)

Brought to you by Alejandro Gutierrez's team (School of Engineering at UC Merced) Learn how to use Computer-Aided Design (CAD) to conduct your first engineering project! You will learn how to draft, design, and fabricate a machine using CAD and 3D printing.

- · Times: 9 am to 4pm, one week session
- · Pricing: \$100

### # 2 Robotics (June 25th - June 29th)

Brought to you by Dr. YangQuan Chen's Team (School of Engineering at UC Merced) the students will launch their own robot creations to suit their own design ideas entirely from scratch using MakeBlock Ultimate 2.0!

- . Times: 9 am to 4pm, one week session
- Pricing: \$100

### # 3 Hands-on Coding (July 9th - July 13th)

#### Brought to you by Chi Yan Leung's team (School of Engineering at UC Merced)

Students will explore problem solving in software development and learn basic web programming techniques

- . Times: 9 am to 4pm, one week session
- Pricing: \$100

### # 4 CSI: UC Merced (July 16th - July 17th)

### Brought to you by CalTeach and UC Merced Police Department

Come explore the world of forensic science at UC Merced. Students will learn cutting edge crime scene analysis, talk with real Forensic Investigators and explore activities in crime scene investigation, fingerprint analysis and more!

- · Times: 9 am to 4pm, two-day session
- · Pricing: \$40

### # 5 Life as a Biologist: Dissections & More! (July 18th - July 20th) Brought to you by UC Merced Biology Instructional Labs Unit

Students will be conducting experiments highlighting microscopy, animal physiology (including muscles and neural receptors), plant anatomy, and microorganisms

- . Times: 9 am to 4pm, three-day session
- Pricing: \$60

## PRICING FOR THE SESSIONS INCLUDE SNACKS, DRINKS, LUNCH & INSTRUCTION FOR EVERYDAY OF THE SESSION.

Registration link: https://commerce.cashnet.com/UCME251\_W1

- Please register at this link to reserve a spot and pay for the workshops
- Registration Deadline: Friday, June 8th 2018

Questions? Email calteach@ucmerced.edu or call 209-228-4098