

San Joaquin County Office of Education

STEM CAMPS

Intro Forensic Biotech Camp Harmony Grove | June 3-5, 2025, 9:00AM - 2:30PM | Grades 6-12

Explore the field of biotechnology through engaging and hands-on experience utilizing MiniOne kits. The camp provides a unique opportunity for students to delve into molecular biology, DNA analysis, and other biotechnological processes in a fun and educational setting. Through practical activities and guidance from experienced instructors, attendees gain valuable insights into the exciting world of biotechnology, fostering both scientific curiosity and practical lab skills. Register: <https://bit.ly/biotechone25>

BEAM Advanced Biotech Camp - High School, Harmony Grove | June 16-18, 2025, 9:00AM - 2:30PM | Grades 9-12

This camp builds upon the foundations established in the Biotech Camp - Level 1 or an equivalent HS Biotech course. Participants in this camp delve deeper into sophisticated experiments and advanced applications using the MiniOne biotech kits. Students will be exposed to careers and connected to STEM experts within agriculture, bioindustry manufacturing, and biotechnology, to understand the real-world applications of their learning. Register: <https://bit.ly/BEAMbiotechhs25>

Material Science, SJCOE Fab Lab | June 23-24, 2025, 9:00AM - 2:30PM | Grades 9-12

This high school camp focuses on chemistry and physics. How do we use materials to design structures to solve problems? Students will use CAD to engineer structures, write code to gather data, and investigate substances at a microscopic scale. Register: <https://bit.ly/FLmaterial25>

Robotic Inventions, WEC - Harmony Grove | June 23-25, 2025, 9:00AM - 2:30PM | Grades 6-8

This is a fun, introductory class using the powerful Mindstorms Lego EV3 Robotics system. Students will explore electrical and engineering concepts, build various robots with different sensors, and use the computer to program their robots to respond to sensor and perform desired tasks. Register: <https://bit.ly/FLinventions25>

Engineering with AI, SJCOE Fab Lab | June 25-27, 2024, 9:00AM-2:30PM | Grades 9-12

Artificial Intelligence is increasingly a part of every tool and service. It is added there by engineers and computer scientists. As we enter an AI age, students can learn the foundations of AI as well as integrate AI into robotic inventions.

Register: <https://bit.ly/FLengineerforArtIntel25>

The Art of Coding, WEC - Harmony Grove | June 26-27, 2025, 9:00AM-2:30PM | Grades 3-5

Coding involves seeing patterns and using mathematical reasoning to create new works defined by logic and calculations. It is a special type of art in which code can create images, music, and more. Students will use to code in this camp to express themselves and make multimedia creations. Register: <https://bit.ly/FLartofcoding25>



Engineering Wearable Tech, SJCOE Fab Lab | July 7-9, 2024, 9:00AM-2:30PM | Grades 6-8

Do you ever sketch out an idea for a useful fashion or a handy gadget? Do you dream of prototyping your idea and pitching it to others? This hands on "maker" class will expose students in grades 6-8 to the basic computer programming/coding skills. They will also have the opportunity to work with state of the art 3D printing and laser cutting equipment in the SJCOE FabLab. Register: <https://bit.ly/FLwearabletech25>

Engineering with Augmented Reality, SJCOE Fab Lab | July 10-14, 2025, 9:00AM - 2:30PM | Grades 6-8

Students will use computer science and technology to make 3D models. Skills will include coding, and computer aided design. Technology will include Nintendo Augmented Reality and Zspace.

Register: <https://bit.ly/FLaugmentedreality25>



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Contact: SJCOE STEM Programs, (209) 468-4880

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Engineering in a Virtual World with Minecraft Education, WEC- Harmony Grove| July 7-9, 2025, 9:00AM-2:30PM | Grades 5-8

Kids can start programming in elementary school! Scratch, an object-oriented programming language, is capable of doing all sorts of computer tasks, even designing or modifying classic video games! Register: <https://bit.ly/FLminecraft25>

Introduction to Engineering with LEGO, WEC - Harmony Grove | July 10-14, 2025, 9:00AM - 2:30PM | Grades 3-5

Students at this workshop will have fun learning to build and program LEGO WeDo robotic devices, exploring engineering concepts and creating the code to have them perform desired behaviors. Register: <https://bit.ly/FLintrotolego25>

Game Engineering with Nintendo Switch and Sphero, SCJOE Fab Lab | July 15-17, 2025, 9:00AM - 2:30PM | Grades 6-8

The Nintendo Switch and Sphero are electronic devices, that can be programmed. With Nintendo Labo, some coding, and a giant makerspace, students can engineer fun inventions using these powerful devices. Register: <https://bit.ly/FLnintendosphero25>

Engineering for Life, WEC - Harmony Grove | July 15-17, 2025, 9:00AM - 2:30PM | Grades 6-8




This camp focuses on how students can use engineering, data, and AI to maintain ecosystems and agriculture. Students will program LEGO robots, investigate biological systems, and gather and analyze environmental data. Register: <https://bit.ly/FLengineerlife25>

Exploring 3D Design, WEC - Harmony Grove | July 18-22, 2025, 9:00AM - 2:30PM | Grades 3-5

Students will use computer science and technology to make 3D models. Skills will include coding, and computer aided design. Technology will include Nintendo Augmented reality and Zspace. Register: <https://bit.ly/FL3Ddesign25>

Primary Coding and Robotics, WEC - Harmony Grove | July 18-22, 2025, 9:00AM - 12:30PM | Grades 1-2

Students will write basic code in fun activities, program small robots for motion and interaction and explore engineering through building challenges. Register: <https://bit.ly/FLprimary25>

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| Intro Forensic Biotech Camp  | BEAM Advanced Biotech - High School  | Material Science  | Robotic Inventions  | Engineering w/ Artificial Intelligence  |
| The Art of Coding  | Engineering Wearable Tech  | Engineering w/ Augmented Reality  | Engineering in Virtual World w/ Minecraft Education  | Intro to Engineering w/ LEGO  |
| Game Engineering w/ Nintendo Switch & Sphero  | Engineering for Life  | Exploring 3D Design  | Primary Coding and Robotics  | |



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