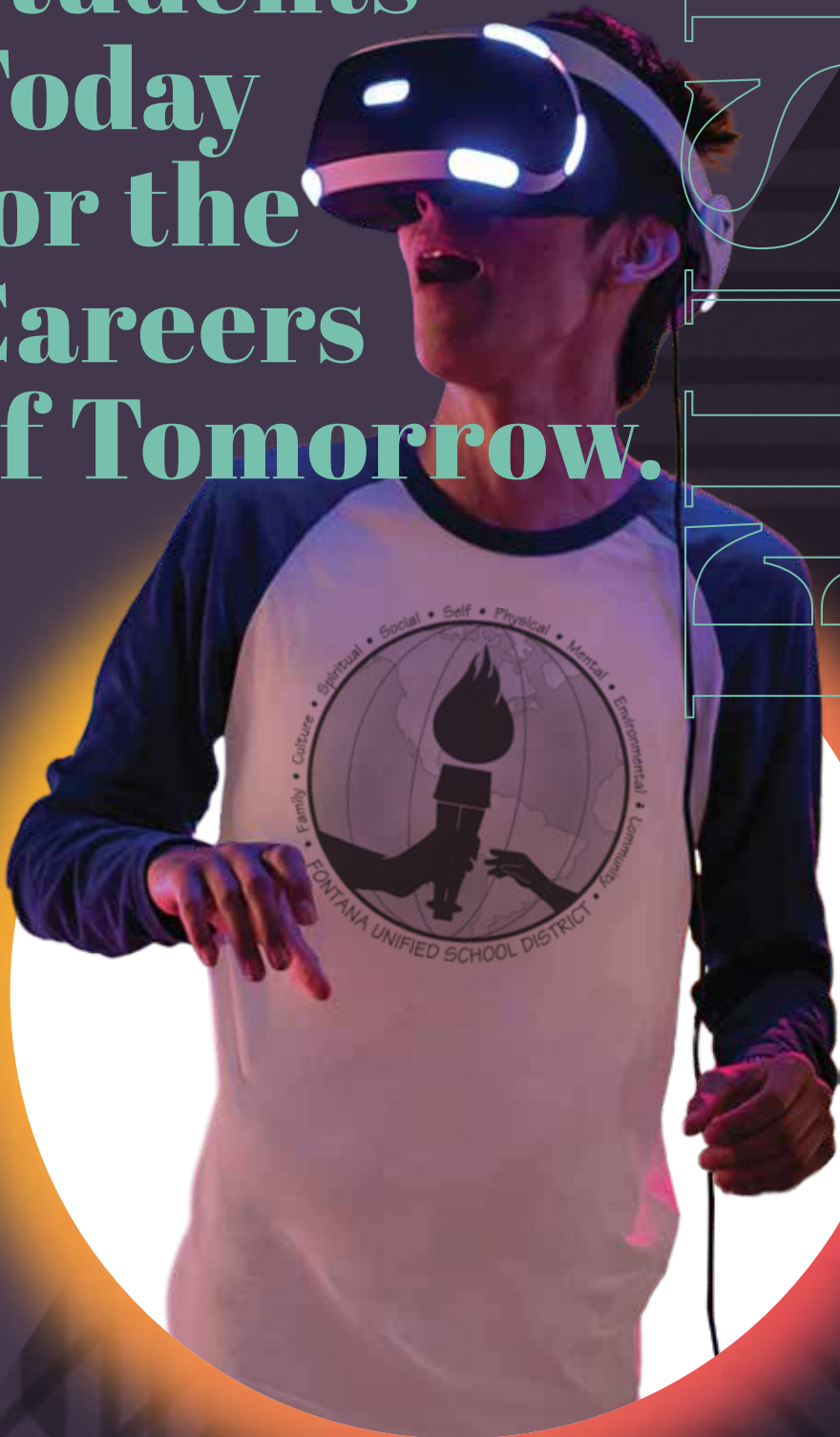


Preparing Students Today for the Careers of Tomorrow.

DESIGN



FONTANA UNIFIED SCHOOL DISTRICT

Together, we are helping young minds reinvent the future.



Over the past decade, business across all sectors has changed dramatically. As a result, workforce skills and requirements have also changed. There are jobs today that didn't exist 10 years ago — data scientist, biotech engineer, app developer — and who knows what the next decade will bring with new roles and new requirements not yet imagined.

The speed of technological innovation and industry demand requires education to work together with industry to ensure our students are being engaged and trained to meet these new demands and challenges. Providing hands-on, experience-based and practical learning is critical to address current and future employment needs.

By partnering with leaders in industry and business, Fontana Unified School District is working to create forward-projected programs and pathways that provide students with the opportunity to deepen their understanding of the real world by creating ways to turn their passions and interests into exciting careers of tomorrow.

We have identified the **8** key emerging industry sectors at the forefront of innovation, offering exciting new career opportunities for students now and into the next decade:

— **CLOUD COMPUTING** —

— **AUGMENTED REALITY AND ARTIFICIAL INTELLIGENCE** —

— **BIOTECHNOLOGY** —

— **PERSONALIZED HEALTH** —

— **RENEWABLE ENERGY AND SUSTAINABLE ENVIRONMENTS** —

— **VIRTUAL REALITY** —

— **ECOMMERCE** —

— **AUTONOMOUS VEHICLES** —

Cloud Computing

01



- A.B. MILLER HIGH SCHOOL
- SUMMIT HIGH SCHOOL

**The only way to
discover the limits
of the possible is to
go beyond them
into the impossible.**

- Arthur C. Clarke

There's a Cloud on the Horizon.

It's an exciting time to enter the world of IT. With cloud-based solutions now being used throughout every industry sector, cloud computing specialists are expected to always be in high demand to keep up with "the cloud." Developments in hybrid cloud, network security, cloud computing and much more present a multitude of opportunities and newfound decisions to make. Innovators leverage the cloud to create new products and services, as well as incorporate new channels or payment options into their business models.

At A.B. Miller and Summit High Schools, students are learning a wide range of valuable computer/IT skills including computer programming, cyber security and web design. From the classroom to the workroom, Networking and Cyber security students are reinventing learning by stepping out of the classroom and into "the cloud."



Augmented Reality Artificial Intelligence



**The greatest invention in
the world is the mind of a child.**

- Thomas Edison

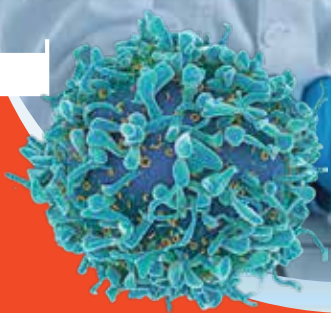
◦ **SUMMIT HIGH SCHOOL**

The Future is Now.

Our students are learning how Artificial Intelligence (AI) applies machine learning, deep learning, and other techniques to solve real-world problems. Machine learning focuses on the development of computer programs that can access data and use it to learn for themselves.

Career pathways in the Information and Communication Technologies sector are preparing students for a future in the industry through a curriculum that includes a fundamental understanding of the creation of robotic and automated systems. Mechatronics students do much more than study robots – they build them, interact with them, explore their design and function, and push them to their limits.

Bio Technology



◦ FONTANA HIGH SCHOOL

The Science of Today is the Technology of Tomorrow.

The integrated, multidisciplinary field of biotechnology represents new advances in understanding and controlling life processes through the development of exciting new technologies. Today, biotechnology is making a difference towards sustainability, allowing us to efficiently break down waste and produce new materials with lower pollution, water, land, and energy use. This fascinating industry covers many different disciplines (e.g. genetics, biochemistry, molecular biology, kinetic designs, etc.), with new technologies and products being developed every year within the areas of medicine, agriculture, and industrial biotechnology.

Students in Fontana High School are training in the biotechnology -sciences while developing highly sought-after business skills. Students focus on functioning both as an administrator and as healthcare professional, learning how to perform clinical duties and manage administrative tasks.

I think the biggest innovations of the 21st century will be at the intersection of biology and technology. A new era is beginning.

-Steve Jobs

Personalized Health



- FONTANA HIGH SCHOOL
- A.B. MILLER HIGH SCHOOL

Shaping the Health Systems of the Future.

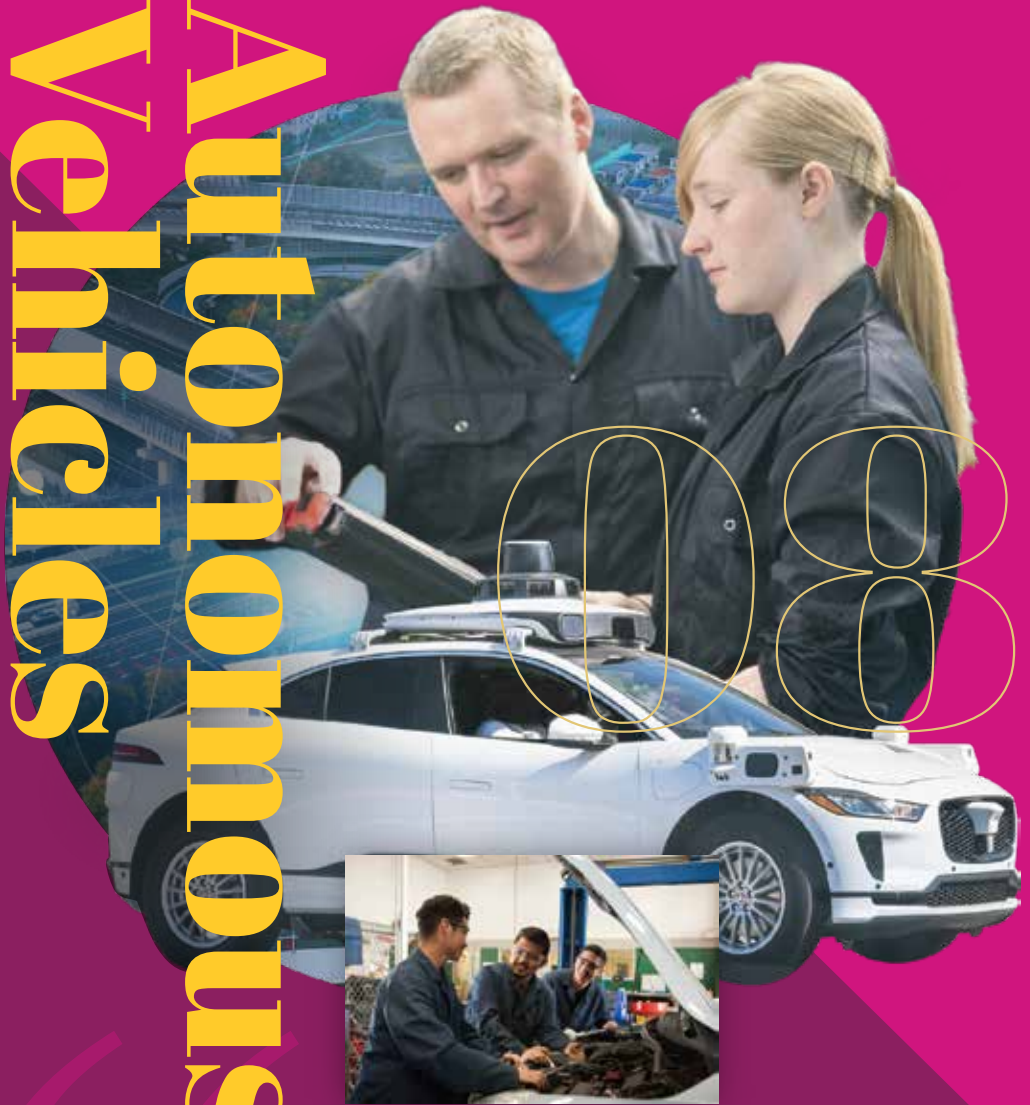
The digital revolution in healthcare has provided the ability to combine new technology with old-fashioned personal interaction, providing patients with personalized service that helps them find innovative and creative solutions to increasingly complicated health issues.

Students in the medical pathways are spearheading the next generation of healthcare with partners in our region and beyond, by practicing patient care skills and techniques firsthand through real-world curriculum.

**The true sign
of intelligence
is not knowledge
but imagination.**

Albert Einstein

Autonomous Vehicles



**Coming together is the beginning.
Keeping together is progress.
Working together is success.**

- Henry Ford

- HENRY J. KAISER HIGH SCHOOL
- SUMMIT HIGH SCHOOL SYSTEMS

Pushing Mobility Forward.

Today's students will play an important role in upgrading infrastructure, modernizing laws, and creating a pro-innovation environment to advance the development and deployment of automated driving systems.

With access to state-of-the-art equipment in each of the auto bays, students in the Systems Diagnostics, Service and Repair pathways participate in real-world work experiences alongside leaders in the industry.



Renewable Energy & Sustainable Environments

**I could either watch it
happen or be a part of it.**

- Elon Musk

• **HENRY J. KAISER HIGH SCHOOL**

Making a World of Difference.

With the goal of increasing energy efficiency and reducing the environmental impact of energy use and conversion, this interdisciplinary, culturally relevant industry requires our students to face the sustainability challenges not only of urban California, but on a global level.

Through the Kreate[®] Academy at Henry J. Kaiser High School, students are already being exposed to the world of sustainable energy by focusing on renewable energy concepts including Hybrids, Fuel Cell and Electric features. Through partnerships with Sunrise Ford in Fontana and Ford Motor Company, students interact with industry professionals and participate in real-world learning experiences.

Virtual Reality



• A.B. MILLER HIGH SCHOOL

The most important thing we can do is inspire young minds.

- John Glenn

Exploring the Futuristic Frontier.

We are teaching thinkers and builders who are fluent in the language of virtual reality, augmented reality, and the vast gray area between. To prepare them for our rapidly changing world, we want our students to have the opportunity to explore futuristic frontiers that extend into industries like science, logistics, manufacturing and health care.

At A.B. Miller high school, it's more than providing students with a VR headset or an AR app. It's learning about the entirely new paradigm of working, creating and communicating in a screenless world. We want to create the next generation of leaders for immersive media experiences.

E-Commerce



Every once in a while, a new technology, an old problem, and a big idea turn into an innovation.

- Dean Kamen

- JURUPA HILLS
- SUMMIT HIGH SCHOOL

Putting knowledge to Action.

E-Commerce has come a long way since it began in the 1970s, and there is a reason why. With new technologies emerging such as VR, AR, biometrics and more, E-Commerce will only continue to grow and thrive. With the internet becoming an essential requirement of everyday life, it is important that our workforce be prepared to plan, manage, supervise, and market electronic business operations, products, and services provided online.

Career pathways at each of these high schools expose students to emerging curriculum including mobile commerce (mCommerce), a rapidly growing new avenue of eCommerce that is mostly driven by the expanding market and influence of smartphones, online shopping and the use of social media.



A Message from Our Superintendent

At Fontana Unified School District, we are dedicated to reaching new levels of achievement by inspiring a culture of innovation that will introduce and prepare our students for exciting careers in a multitude of emerging industries, as well as ones that are not yet realized.

Through relevant, intentional and dedicated business partnerships, our students gain the knowledge and hands-on skills needed to be successful both in the world of work and life.

I invite you to join us in supporting our learning community of parents, dedicated teachers, staff and the Board of Education as we come together to connect our students to leading growth, preparing them to become the innovators and leaders of tomorrow.



Randal S. Bassett

Superintendent of Schools,
Fontana Unified School District



While industry has never faced the magnitude of change and disruption it does today, the challenges also come with tremendous opportunity for education to deliver more value to students and the workforce.

By capitalizing on new technologies and collaborating with industry we can create a new model of education and create a supportive ecosystem, designed to shape a new way of working and learning. Working together to create a “new” education system will guarantee our students are adequately prepared to succeed in an evolving world.

We invite you to join us as we help to shape the innovators of tomorrow.

To learn how you can get involved

Contact:

FONTANA UNIFIED SCHOOL DISTRICT

College | Career & Economic Development Department

9680 Citrus Avenue | Fontana | CA | 92335

fusd.net

(909) 357-5000

Facebook: /FontanaUnified

Twitter: @fontanaunified

Instagram: @fontanaunified

The Board prohibits, at any district school or school activity, unlawful discrimination, including discriminatory harassment, sexual harassment, intimidation, and bullying, targeted at any student by anyone, based on the student's actual or perceived race, color, ancestry, national origin, nationality, ethnicity, ethnic group identification, age, religion, marital or parental status, pregnancy status, physical or mental disability, sex, sexual orientation, gender, gender identity, gender express, genetic information, immigration status, or association with a person or group with one or more of these actual or perceived characteristics. For questions or complaints, contact Equity Compliance Officer: Craig Baker, Senior Executive Director, Student Services at (909) 357-5000, EXT 29194, TitleIX@fusd.net and Title IX Coordinator: Linda Young, Director, Certificated Human Resources, at (909) 357-5000, EXT 29045, TitleIX@fusd.net.

