UC RIVERSIDE
Marlan and Rosemary Bourns College of Engineering

MOBILITY.ENGR.UCR.EDU



ONLINE MASTER'S DEGREE IN MOBILITY ENGINEERING

MOBILITY IS SHIFTING. LEAD THE CHANGE.

- Join the first and only mobility engineering program in the University of California system and the West Coast tackling sustainable transportation solutions
- Experience a curriculum rooted in 30 years of research and education at the Center of Environmental Research and Technology (CE-CERT) www.cert.ucr.edu
- Study in a comprehensive program encompassing both leadership strategy and technical skills
- Enhance your knowledge of internal combustion engines, fuels, emissions, connected and intelligent transportation systems, shared mobility, autonomous vehicles, and electric vehicles
- Connect with the robust industry ecosystem and environmental agencies nearby
- Interact with distinguished faculty members from multiple disciplines
- Earn a Master's degree in as little as 13 months; no residency required

Top 20

Best public global university for engineering

U.S. News, Best Global Universities, 2022

No. 1

University in the U.S for social mobility; three years in a row

U.S. News, Best Colleges, 2022

Top 30

Best schools for engineering majors for salary potential

Payscale.com, 2020

No. 14

U.S. college that pays off the most in 2020

CNBC MakeIt, 2020

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WHY MOBILITY ENGINEERING

The movement of people, goods, and services is facing a revolution. Mobility engineering is a rapidly growing industry and the future of transportation:

- Rapid electrification of vehicles are changing the prospect of automotive and transportation engineering
- Automotive engineers can no longer develop cars without considering connectivity and autonomy
- Transportation engineers need a deeper understanding of vehicle dynamics and control than ever before
- Tomorrow's technology requires conventional and emerging automotive and transportation engineering knowledge

FACULTY RESEARCH AREAS

Electric vehicle powertrain and battery control: Optimization of powertrain, battery temperature control, and development of battery fast charging technology

Emissions and fuel: Quantification of tailpipe and non-tailpipe emissions, and alternative fuel research

Connected and automated vehicles (CAV): Cooperative perception, intelligent and shared decision making, human factors in CAVs, cooperative vehicle control and traffic management

SAMPLE COURSE LISTINGS

- Technology Innovation and Strategy for Engineers
- Intelligent Transportation Systems
- Environmental Impacts if Energy Production and Conversion
- Internal Combustion Engines
- Electrochemical Engineering
- Advanced Air Pollution Control and Engineering
- Advanced Kinetics and Reaction Engineering
- Energy: Production, Uses, Economics, and Sustainability
- Combustion and Energy Systems
- Engineering in the Global Environment