

**Resolution 2020-2021A**  
**Resolution to Approve New Major, Automotive Engineering, in Bachelor of Science  
in Mechanical Engineering**

Recommended by the Commission on Undergraduate Studies and Policies

First Reading:

September 14, 2020

Faculty Senate:

Staff Senate:

Graduate Student Assembly:

Student Government Association:

Second Reading:

Approved by University Council:

Approved by the President:

First Effective Date to Declare Major: Fall 2020

First Effective Date to Graduate: Winter 2022

**WHEREAS**, the Major in Automotive Engineering will advance knowledge and education to make the next generation of autonomous and non-autonomous vehicles that will enhance the safety and efficiency of the road transportation system and will save lives with new generation of technology; such as 1) advanced chassis control systems, 2) autonomous vehicles, and 3) intelligent systems; and

**WHEREAS**, Automotive Engineering represents a unique academic and interdisciplinary field that will educate the next generation of engineering students with a hands-on as well as theoretical career on emerging topics of tire mechanics, vehicle dynamics, crash worthiness, electric and IC engines, chassis engineering, human machine interface, vehicle control; and

**WHEREAS**, the Department of Mechanical Engineering supports the mission of continued emphasis on automotive engineering by educating the next generation of automotive engineers; and

**WHEREAS**, the new curriculum will allow students to fundamentally understand the principles of automotive engineering, vehicle dynamics and control, and apply them to the next generation of complex transportation systems in a wide range of applications including, but not limited, to autonomous and connected vehicles, chassis control systems, advanced driver assist systems; and

**WHEREAS**, the Major in Automotive Engineering is designed for students who wish to pursue a career in automotive industries, tire industries, and autonomous vehicle industries; and

**WHEREAS**, students in the Major in Automotive Engineering will gain a comprehensive and interdisciplinary education of complex dynamical systems, transportation systems, experimental methodologies, engineered control systems, and computer programming.

**THEREFORE, LET IT BE RESOLVED** that the Major in Automotive Engineering be approved for the addition to the Bachelor of Science in Mechanical Engineering effective Fall 2020 and the proposal forwarded through University governance and to the President for the approval.