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.