TO: The Faculty of the College of Engineering

FROM: The Faculty of the School of Mechanical Engineering

RE: MSPE 29800 Programming and Computer Modeling for Motorsports: Pre-requisite and Course description update

The Faculty of the School of Mechanical Engineering has approved the following change. This action is now submitted to the Engineering Faculty with a recommendation for approval.

From:
Prerequisites:
MSPE 27200 Introduction to Motorsports

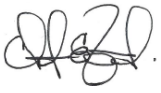
To:
Prerequisites:
MA 16600 Integral Calculus

Reason: MSTE 27200 Introduction to Motorsports is no longer offered in the new MSPE plan of study as the course is being replaced by MSPE 29000 Motorsports Seminar. The addition of the MA 16600 Integral Calculus as a prerequisite expands the material available to the faculty to instruct in the class thus better aligning the learning outcomes to the requests of the members of the Industry Advisory Board.

From:
Course Description:
Introductory course detailing methods for creating virtual models of objects and systems for design, analysis and optimization of motorsports components. Virtualization methods include object-oriented programming techniques for creating mathematical models, and solid modeling techniques for visualizing objects as three-dimensional representations. The methods introduced through this course lay the foundation for advanced courses in vehicle design, simulation, and analysis. Admission to MSPE program required. **Credits:** 2.00

To:
Course Description:
Introductory course detailing methods for creating virtual models of vehicle systems for design, analysis and optimization. Virtualization methods include object-oriented programming techniques for creating mathematical models in Excel, Matlab and Python. Students will learn the basics of data regression consistent with the analysis methods conducted in the motorsports industry. The methods introduced through this course lay the foundation for advanced courses in vehicle design, simulation, and analysis. Credits: 2.00

Reason: The new course description better aligns the evolution of the learning outcomes of the course to the feedback from alumni, industry partners, and members of the motorsports Industry Advisory Board.



1/15/2025

Christopher E Finch, Professor of Practice and Site Director Motorsports Engineering
School of Mechanical Engineering