Michigan State University
Department of Mechanical Engineering

AUTOMOTIVE POWERTRAIN CONCENTRATION

(12 Credits)

A mechanical engineering degree with the automotive powertrain concentration attests to the interests and expertise of students in subjects that are of direct relevance to today's automotive industry. This industry, which is currently dominated by vehicles powered by internal combustion engines, adapts rapidly to technological changes and environmental regulation and provides many career opportunities for mechanical engineering graduates. Students who meet the requirements of this concentration will have expertise in fundamentals of combustion, modern applications of computational fluid mechanics and heat transfer, and a range of technical aspects of today's vehicle powertrains.

To complete a Bachelor of Science degree in mechanical engineering with an automotive powertrain concentration, students must complete the requirements for the B.S. degree, including:

• ME	422 Introduction to Combustion	3 credits (Fall Only)
• ME	444 Automotive Engines	3 credits (Fall Only)
• ME	445* Automotive Powertrain Design	3 credits (Spring Only)

Plus *one course* from the following list:

• ME	433 Computational Fluid Dynamics	3 credits (Spring Only)
• ME	442* Turbomachinery	3 credits (Spring Only)

CREDIT DISTRIBUTION: The 12 credits in the concentration will be applied to the Senior Elective requirement (*including* the "design intensive" course component). Completion of the concentration will be noted on the final transcript.

The asterisk (*) signifies that the course is design intensive.