

Purdue Online MSME POS SAMPLE

Below is just a sample of what a plan of study (POS) might look like for someone interested in this area. It is not a fixed plan, and you should create your plan of study based on what your interest is from the various course offerings. Always check to see what is available each semester when the course catalog is released, as the course offerings may change from what was initially expected.

Coursework Requirements

30 credit hours are required to complete the online MSME degree, and can consist of 1-, 2-, and 3-credit hour courses.

- Must include **15 credit hours** of Mechanical Engineering graduate-level courses
- Must include **6 credit hours** of graduate-level Applied Math, three credits of which must be taken from the Department of Mathematics.
- **9 credit hours** of graduate-level Technical Elective courses from Engineering, Mathematics, or Science.

AREA: Solid Mechanics

Area	Courses Title	Subj. Abbr.	Course No.	Credit Hours	Regis. Type	Grade	B or better	Transf -From	Date To Be Completed
RELATED	Advanced Mathematics for Engineers and Physicists I	MA	527	3			-	-	Fall 2021
PRIMARY	Elasticity in Aerospace Engineering	AAE	553	3			-	-	Fall 2021
PRIMARY	Mechanics of Composite Materials	AAE	555	3			-	-	Spring 2022
RELATED	Advanced Mathematics for Engineers and Physicists II	MA	528	3			-	-	Spring 2022
PRIMARY	Numerical Methods in Mechanical Engineering	ME	581	3			-	-	Fall 2022
PRIMARY	Mechanical Behavior of Aerospace Materials	AAE	548	3			-	-	Fall 2022
PRIMARY	Advanced Dynamics	ME	562	3			-	-	Spring 2023
PRIMARY	Finite & Boundary Element Methods	ME	681	3			-	-	Spring 2023
PRIMARY	Statistical Thermodynamics	ME	501	3			-	-	Fall 2023
PRIMARY	Decision Making in Engineering Design	ME	597	3			-	-	Fall 2023
Note: Additional Courses to Consider:									
Intermediate Fluid Mechanics ME 50900					Machine Design ME 57000				
Micromechanics of Materials ME 55900					Intermediate Heat Transfer ME 50500				
Computational Fracture Mechanics ME 65000					Mechanical Vibrations ME 56300				
Reliability Based Design ME 57100					Lubrication, Friction and Wear ME 55600				
Data Analytics for Scientists and Engineers ME 59700					Materials Engineering Fundamentals MSE 60000				
Numerical Methods in Heat, Mass, and Momentum Transfer ME 60800									

