

Mechanical Engineering Department: MS in Mechanical Engineering

Courses	Degree Learning Outcomes						
	1	2	3	4	5	6	7
ME 520	X						
ME 530	X						
ME 532	X			X			
ME 535	X			X			
ME 540	X			X			
ME 543	X			X			
ME 552	X			X			
ME 554	X			X			
ME 555	X			X			
ME 556	X			X			
ME 580	X			X			
ME 582	X			X			
ME 585	X			X			
ME 610	X		X	X		X	
ME 640	X		X	X		X	
ME 645	X		X	X		X	
ME 646	X		X	X		X	
ME 651	X		X	X		X	
ME 653	X		X	X		X	
ME 656	X		X	X		X	
ME 657	X		X	X		X	
ME 658	X		X	X		X	
ME 661	X		X	X		X	
ME 681	X		X	X		X	
ME 683	X		X	X		X	
ME 685	X		X	X		X	
ME 797	X	X	X	X	X	X	X
ME 799	X	X	X	X	X	X	X

Program Educational Objectives (MSME)

The Program Educational Objectives of the Master of Science in Mechanical Engineering program are to produce graduates who will:

1. Be prepared for successful careers in industry, government, academia, or non-profit establishments, and will have an appreciation for lifelong learning.
2. Have the capacity to use advanced analytical and experimental methods needed to continue graduate study at the doctoral level, or to thrive in a research and development environment.

3. Have a breadth of knowledge that fosters an awareness of and skill in interdisciplinary approaches to problem solving.
4. Have a keen sense of professionalism and a commitment to work toward the betterment of society and the world.
5. Embrace diversity and work to foster successful collaborations that are inclusive of all people.

Program Outcomes (Degree Learning Outcomes) (MSME)

1. Excellence. Mastery of the knowledge in their area of specialization, and the ability to apply associated technologies to novel and emerging problems.
2. Breadth. Broaden professional foundations through activities such as internships, fellowships, the Student Research Symposium, and serving on student committees, as appropriate.
3. Problem definition. State a research problem in such a way that it clearly fits within the context of the literature in an area of study, and demonstrate the value of the solution to the research problem in advancing knowledge within that area.
4. Problem solving. Apply sound research methods/tools to problems in an area of study, and describe the methods/tools effectively. Analyze/interpret research data.
5. Professionalism. Participate in professional organizations, becoming members and attending meetings. Present research to local, regional, national, and international audiences through publications in professional journals and conference papers.
6. Communication. Communicate research clearly and professionally in both written and oral forms appropriate to the field.
7. Societal Context. Understand the impact of engineering solutions in a global, economic, and societal context.