

# MATERIALS SCIENCE AND ENGINEERING, MASTER OF SCIENCE (M.S.)

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**Thesis option:** 30 credits

**Non-thesis option (scholarly paper):** 30 credits

The M.S. degree program offers thesis and non-thesis options. The thesis option requires 24 credit hours of course work plus a thesis. The non-thesis option requires 30 credit hours of course work and a scholarly research paper. All students must complete the Program Core requirements as well as all Graduate School requirements. The University of Maryland's Office of Advanced Engineering Education also offers a Professional Master of Engineering (M.E.) degree with a materials science and engineering option which requires 30 credits of graduate coursework and does not require a thesis.

Course	Title	Credits
ENMA650	Nanometer Structure of Materials	3
ENMA660	Thermodynamics in Materials Science	3
ENMA661	Kinetics of Reactions in Materials	3
ENMA671	Defects in Materials	3
or ENMA620	Polymer Physics	
ENMA688	Seminar in Materials Science and Engineering	3
<b>Thesis or Non-Thesis Requirements</b>		
Select one of the following:		15
Thesis:		
ENMA799	Master's Thesis Research	
Advanced graduate courses		
Non-Thesis:		
ENMA797	Independent Study (Complete a scholarly paper)	
Advanced graduate courses		
<b>Total Credits</b>		<b>30</b>