

Table 2: Materials Engineering

Dual Degree Program Wisconsin Lutheran College PHYSICS and University of Wisconsin- Milwaukee MATERIALS ENGINEERING			
UW-MILWAUKEE REQUIREMENTS			
Course/Credits required to earn the UWM Degree	Credits	Fulfilled by WLC Degree (X = yes, blank = no)	Still to be completed at UWM (X = yes, blank = no)
General Education Requirements			
Arts	3	X	
Humanities	6	X	
Social Sciences	6	X	
Cultural Diversity		X	
Competencies		X	
Free Electives	2	X	
Natural Science Requirements			
CHEM 105 General Chemistry for Engineers	5	X	
PHYSICS 209 Physics I	4	X	
PHYSICS 214 Lab Physics I	1	X	
PHYSICS 210 Physics I	4	X	
PHYSICS 215 Lab Physics II	1	X	
Mathematics Requirements			
MATH 231 Calculus and Analytic Geometry	4	X	
MATH 232 Calculus and Analytic Geometry	4	X	
MATH 233 Calculus and Analytic Geometry	4	X	
ELECENG 234 Analytical Methods in Engineering	4	X	
Engineering Core Requirements			
CIV ENG 201 Statics	3		X
CIV ENG 202 Dynamics	3	X	
CIV ENG 303 Strength of Materials	4		X
COMPSCI 240 Intro Engineering Programming	3		X
EAS 200 Professional Seminar	1		X
ELECENG 301 Electrical Circuits I	3		X
IND ENG 467 Intro Statistics Physical Sciences & Engineering	3		X
Materials Engineering Major Requirements			
MATLENG 201 Basic Engineering Materials	4		X
MATLENG 330 Materials and Processes in Manufacturing	3		X
MATLENG 402 Physical Metallurgy	3		X
MATLENG 410 Mechanical Behavior of Materials	3		X
MATLENG 411 Materials Laboratory	3		X
MATLENG 442 Thermodynamics of Materials	3		X
MATLENG 443 Transport Phenomena in Materials Processing	3		X
MATLENG 452 Ceramic Materials	3		X
MATLENG 453 Polymeric Materials	3		X
MATLENG 490 Senior Design Projects I	1		X
MATLENG 491 Senior Design Projects II	3		X
Materials Engineering Technical Electives - 24			
MECHENG 301 Basic Engineering Thermodynamics	3	X	
Group A1 Technical Electives	21		X
Total Credits - Materials Engineering Major	124	54	70