

March 2025 if entered MSE program Fall 2025 or later

MATERIALS SCIENCE AND ENGINEERING CURRICULUM CHECKLIST

Name: _____

Date: _____

Course	Credits	Course Title	Prerequisites/Corequisites
CHEM0960	3 _____	Gen. Chem. for Engr. 1	
CHEM0970	3 _____	Gen. Chem. for Engr. 2	CHEM0960
MATH0220	4 _____	Anal. Geometry & Calc. 1	
MATH0230	4 _____	Anal. Geometry & Calc. 2	MATH0220
MATH0240	4 _____	Anal. Geometry & Calc. 3	MATH0230
MATH0280	3 _____	Matrices & Linear Algebra	MATH0220
MATH0290	3 _____	Differential Equations	MATH0230
PHYS0174	4 _____	Phys. for Sci. & Engr. 1	<i>MATH0220</i> ¹
PHYS0175	4 _____	Phys. for Sci. & Engr. 2	PHYS0174, <i>MATH0230</i>
_____	3 _____	Humanity Elective	<u>Student has fulfilled</u>
_____	3 _____	Social Science Elective	☐ Breadth
_____	3 _____	Humanity/Soc. Sci. Elective	☐ Depth
_____	3 _____	Humanity/Soc. Sci. Elective	☐ W-course
_____	3 _____	Humanity/Soc. Sci. Elective (e.g. ENGCMP0210)	
_____	3 _____	Humanity/Soc. Sci. Elective (e.g. ENGCMP0412, also W-course)	
_____	3 _____	Communication Skills Elective	
ENGR0011	3 _____	Intro. to Engr. Analysis	
ENGR0012	3 _____	Engr. Computing	ENGR0011
ENGR0135	3 _____	Statics & Mech. of Mater. 1	MATH0230, PHYS0174
ENGR0021	3 _____	Prob & Stat for Engineers	
_____	3 _____	Engineering Elective	
MEMS0023	3 _____	Intro. to MSE	MATH0230, PHYS0174
MEMS0024	3 _____	Intro. to ME Design	ENGR0011
MEMS0041	3 _____	Materials Processing	MEMS0023
MEMS0048	3 _____	Thermodynamics of Materials	PHYS0174, CHEM0960, <i>MATH0290</i>
MEMS1001	3 _____	MSE Laboratory 1	MEMS0023, <i>MEMS1053</i>
MEMS1002	3 _____	MSE Laboratory 2	<i>MEMS1070</i>
MEMS1003	3 _____	MSE Laboratory 3	<i>MEMS1066</i>
MEMS1030	3 _____	Material Selection	MEMS0023, MEMS1028
MEMS1043	3 _____	Senior Design Project	<i>Senior Standing</i>
MEMS1052	3 _____	Heat and Mass Transfer	MEMS0048
MEMS1053	3 _____	Struct. of Crystals & Diffract.	MEMS0023
MEMS1058	3 _____	Electromagnetic Prop. Mater.	MEMS0023
MEMS1063	3 _____	Phase Transformations	MEMS1053
MEMS1066	3 _____	Methods of Mater. Characterization	MEMS1053
MEMS1070	3 _____	Mech. Behavior of Materials	MEMS0023
MEMS1079	3 _____	Senior Mater. Research Proj.	<i>Senior Standing</i>
MEMS1165	3 _____	Materials Design	<i>MEMS1063</i>
_____	3 _____	MSE Technical Elective	
_____	3 _____	MSE Technical Elective	
_____	3 _____	MSE Technical Elective	

¹Italicized courses indicate corequisites, that is, courses that must be taken before or concurrently.