

Materials Science & Engineering

Materials Science Engineering (MATSCIE)

220	Intro Mat & Man						4.00	ENFORCED
10576	A R LEC 100	MWF	1130-1230PM	1571 GGBL		Sevener		
10577	P RW DIS 101	TH	1130-1230PM	1003 EECS		Luce		
10578	P RW DIS 102	TH	130-230PM	1003 EECS		Luce		
10579	P RW DIS 103	TH	1030-1130AM	185 EWRE		Snyder		
27345	P RW DIS 104	TH	1130-1230PM	1123 LBME		Repetto		
29853	P RW DIS 105	TH	130-230PM	107 GFL		Steinke		
32557	P R LEC 200	MW	1130-130PM	224 GFL		Yalisove		

This special section of MSE 220 is ONLY FOR FIRST AND SECOND YEAR STUDENTS. It will be a team based and project based version of the class where the first introduction to the material is NOT lecture, but rather annotated reading. Class time will consist of active learning activities. There will be three group projects in this class. Students will be required to purchase an electronic textbook via the Canvas site that will be live in August. Students will also be required to purchase a subscription to Learning Catalytics (\$12). There are no other fees for the course. Homework is graded for effort and honesty - not accuracy. Quizzes are graded by averaging a closed book, closed notes, individual effort, with an open book, open internet, group effort. You will be rewarded for hard work and honesty on homework and exams without the angst of 100% summative assessment. Do not purchase the book at this time. More information will be available on the following website:

<https://java.engin.umich.edu/220F19/>

25042	A R LEC 300	MWF	830-930AM	1670 BEYSTER		Heron		
25235	P RW DIS 301	TH	1030-1130AM	1014 DOW		Horst		
25236	P RW DIS 302	TH	130-230PM	1018 DOW		Horst		

250	Prin Engr Matl						4.00	ENFORCED
10580	A R LEC 100	MWF	930-1030AM	1571 GGBL		Wynarsky		
Structure, properties, and processing relationships in engineering materials with applications to biomaterials.								
10581	P RW DIS 101	TH	1130-1230PM	1006 DOW		Swerdlow		
19677	P RW DIS 102	TH	130-230PM	104 EWRE		Swerdlow		
19775	P RW DIS 103	TH	130-230PM	1010 DOW		Huang		
19676	P RW DIS 104	TH	1130-1230PM	104 EWRE		Yao		

280	MSE Ugrad Res Opp						1.00-3.00	ADVISORY
	I IND +		ARR	ARR				

330	Thermo of Matls						4.00	ADVISORY, ENFORCED
10588	P R LEC 001	MW	12-130PM	1010 DOW		Shahani		

330	Thermo of Matls						4.00	ADVISORY, ENFORCED
	P R LEC 001	F	1230-130PM	133 CHRYS				

350	Structures of Matls						4.00	ENFORCED
10582	P RW LEC 001	MW	10-1130AM	133 CHRYS		Qi		

350	Structures of Matls						4.00	ENFORCED
	P RW LEC 001	F	130-230PM	1200 EECS				

360	Materials Lab I						3.00	ADVISORY
10583	S R LEC 001	M	230-330PM	224 GFL		Chambers		

Labs for MSE 360 are held in the Van Vlack Undergraduate Lab, second floor of the H.H. Dow building

10584	P RW LAB 002	T	130-530PM	ARR		Derby		
14258	P RW LAB 003	W	130-530PM	ARR		Temeche		
10585	P RW LAB 004	TH	12-4PM	ARR		Rieland		

410	Biomaterials						3.00	ENFORCED
14504	PDR LEC 001	MW	10-1130AM	1014 DOW		Mehta, Moy, Crochran		

For permission to register, contact Maria Steele at msteele@umich.edu.

412	Polymeric Materials						3.00	ENFORCED
10587	P R LEC 001	TTH	830-10AM	1017 DOW		Love		

420	Mech Behavior Matrls						3.00	ADVISORY, ENFORCED
14677	P R LEC 001	TTH	230-4PM	1010 DOW		Sevener		

454	Comp Approaches MSE						3.00	ENFORCED
32387	P R LEC 001	W	12-130PM	ARR		Thornton		

454	Comp Approaches MSE						3.00	ENFORCED
	P R LEC 001	F	1230-2PM	ARR				

This class will be held in the Van Vlack Undergraduate Lab, second floor of the H.H. Dow building.

470	Phys Met						3.00	ADVISORY, ENFORCED
32140	P R LEC 001	TTH	10-1130AM	1032 FXB		Allison		

489	Matls Proc Design						3.00	ADVISORY, ENFORCED
16515	P RW LEC 001	MW	230-4PM	G906 COOL		Taub, Mangin		

490	Research Problems						1.00-3.00	ENFORCED
	DR IND +		ARR	ARR				

493	Special Topics						3.00	ADVISORY
32196	P W LEC 033	TTH	1230-2PM	1008 EECS		Shtein		

The Greatest Materials and Inventions Across Civilizations:

Stone, Ceramic, Bronze, Iron, Gunpowder, Concrete, Steel, Silicon? Materials that defined entire epochs. What do we know about humans? mastery of these materials? How did they change life? Why did they persist? What replaced them and why? Spears, Textiles, Canoes, Alphabet, Printing Press, Steam Engine, Internal Combustion Engine, Pneumatic Tire, Pencil, Telegraph, Electric Lights, Radio, Diode, Transistor, Fiber-optics, Corn Syrup, Syringe, Rockets, iPhone? Devices and constructs that leveraged materials and processes of the day to enable leaps in human capability. What problems were their inventors attempting to solve? What new businesses did they enable? What new problems did they create for humans?

517	Adv Function Poly						3.00	ENFORCED
20147	P RW LEC 001	TTH	430-6PM	2166 DOW		Kim		

532	Adv Therm Matrls						3.00	ADVISORY
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CAT#	Course Title						CR	PREREQ	LAB FEE
Class #	CODE CMP SEC	DAYS	TIME	LOCATION	INSTRUCTOR				
16069	P W LEC 001	MW	10-1130AM	1006 DOW	Kioupakis				
550	Fund Mat Sci & Eng				3.00	ADVISORY			
24631	P W LEC 001	MW	830-10AM	2150 DOW	Laine				
554	Comput Methods				3.00				
25171	P LEC 001	MW	1130-1PM	1018 DOW	Kieffer				
560	Structure Matrls				3.00	ADVISORY			
17901	P LEC 001	MW	3-430PM	3433 EECS	Poudeu-Poudeu				
562	Electron Microscopy I				4.00	ADVISORY			
30356	S LEC 001	MW	1-230PM	1005 EECS	Hovden				
Lab for MSE 562 will be held in the MC@ Center of NCRC North Campus Research Center Building 22									
30358	P LAB 002	T	130-430PM	ARR	Hovden				
593	MSE Special Topics				3.00	ADVISORY			
35434	P W LEC 001	MW	12-130PM	1690 BEYSTER	Singh				
28572	P W LEC 033	TTH	1230-2PM	1008 EECS	Shtein				
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690	Research Problems				1.00-16.00				
	D IND +		ARR	ARR					
890	Colloq in Mat Sci				1.00				
19126	P R SEM 001	F	10-1130AM	1013 DOW	Shahani, Hovden, Qi, Heron				
990	Diss-Precand				1.00-8.00	ADVISORY			
	D IND +		ARR	ARR					
995	Diss-Cand				8.00	ENFORCED			
	DR IND +		ARR	ARR					