Materials Science and Engineering Catalog 2018
NANOMATERIALS CONCENTRATION

Fall 16 hours	**Chem 120 or 128 (4) FA, SP, SU** Prereq-Math 119; recommended background Math 130	**Math 141 or 147 (4) FA, SP, SU** Prereq- Math 130 or Math ACT 28 or Math SAT 630	**EF 151 or 157 (4) FA, SP** Coreq- Math 141 or 147 and EF 105	**EF 105 (1) FA, SP** Coreq- EF 151 or 157	**English 101/118 or 198 or 131 (3) FA, SP, SU** 101 Regular; 118 Honors; 198 Chancellor Honors Only; 131 English as Second Language	
Spring 16 hours	**Chem 130 or 138 (4) FA, SP, SU** Prereq- Chem 120 or 128	**Math 142 or 148 (4) FA, SP, SU** Prereq- Math 141 or 147	**EF 152 or 158 (4) FA, SP, SU** Prereq- EF 151 or 157 Coreq Math 142 or 148	**MSE 101 (1) SP**	**English 102 or 290 or 298 or 132 (3) FA, SP, SU** 102 Prereq 101 or 118; 290 Prereq AP 101 credit 298 Prereq Chancellor Honors only & 198; 132 Prereq 131 ESL	
Fall 17 hours	**MSE 201 or 207 (3) FA, SP, SU** Prereq- Chemistry 120 or 128	**MSE 210 (1) FA** Coreq- MSE 201	**Math 241 or 247 (4) FA, SP, SU** Prereq- Math 142 or 148	**Physics 231 (3) FA, SP, SU** Coreq- Math 142 or 148	**Econ 201 or 207 (4) FA, SP, SU** Social Science	**EF 230 (2) FA, SP** Prereq- EF 105 or CS 102 Coreq- EF 152/158
Spring 16 hours	**MSE 290 (1) SP**	**Math 200 (2) FA, SP** Cannot receive credit if previous C or better in math 251 or 257	**Math 231 or 237 (3) FA, SP, SU** Prereq- Math 142 or 148	**Physics 232 (4) FA, SP, SU** Prereq- Physics 231 Coreq- Math 241 or 247	**MSE 250 (3) SP** Prereq- Math 142 or 148, EF 230 and Coreq- Math 231 and MSE 201	**MSE 260 (3) SP** Prereq- EF 152 /158, Chem 130/138, and Math 241/ 247; MSE 201
Fall 16 hours	**MSE 300 (1) FA** Prereq- MSE 201 and 210	**MSE 301 (3) FA** Prereq- Math 142/148, 231; EF 230	**MSE 320 (3) FA** Prereq- MSE 201 and 260	**MSE 340 or 347 (3) FA** Prereq- MSE 201	**MSE 360 or 367 (3) FA** Prereq- MSE 201	**Gen. Ed. (3) FA, SP, SU** Arts and Humanities
Spring 17 hours	**MSE 304 (WC) (2) SP** Prereq- MSE 300, 320, 340, 360 and ENGL 102, 132, 290, or 298	**MSE 390 or 397 (3) SP** Prereq- MSE 201	**MSE 370 (3) SP** Prereq- MSE 340 and 360 and coreq- MSE 320	**MSE 302 (3) SP** Prereq- MSE 201	**MSE 350 or 357 (3) SP** Prereq- MSE 201	**Technical Elective* (3) FA, SP, SU** Petition required in advance
Fall 15 hours	**MSE 410 or 408 (3) FA, SP** 410 Prereq- Physics 232 & Junior 408 Prereq- MSE 201	**MSE 405 (WC) (3) FA** Prereq- Physics 232; ENGL 102, 132, 290 or 298	**MSE 480 (3) FA** Prereq- MSE 201; level junior	**Gen. Ed. (3) FA, SP, SU** Culture and Civilizations	**Gen. Ed. (3) FA, SP, SU** Social Science	
Spring 16 hours	**MSE 408 or 410 (3) FA, SP** 408 Prereq- MSE 201 410 Prereq- Physics 232 & Junior	**Technical Elective* (3) FA, SP, SU** Petition required in advance	**MSE 489 (OC) (3) SP** Prereq- MSE 304, 340/347, 360/367, 370, 390/397, and 480	**Gen. Ed. (3) FA, SP, SU** Culture and Civilizations	**Gen. Ed. (3) FA, SP, SU** Arts and Humanities	

***Technical electives:** MSE 421, 466, 474; Phys 411. Credit for other courese that address processing, structure, properties or behavior of nanomaterials may be substituted by permission of academic advisor and department head.

Progression

Progression of students to departmental upper-division courses is competitive. Factors considered include overall grade point average, performance in selected lower division courses and evidence of satisfactory and orderly progress through the prescribed curriculum.

Upper Division Status

A lower division student formally applies for upper division status after completing 50 hours of lower division engineeirng curriculum course work with an overall GPA of at least 2.4. This must include MSE 201.

Provisional Status

Students who have completed 50 hours of lower-division engineering curriculum course work with an overall GPA between 2.0 and 2.4 may apply for provisional status.
The granting of provisional upper-division status is based on the availability of space in the departmental programs after upper-division status students have been accommodated.
Provisional students are required to demonstrate their ability to perform satisfactorily in upper-division courses by attaining a minimum GPA of 2.0 in at least 8 hours of 300-level required courses specified by the department. Further progression to upper-division courses is dependent upon this minimum level of performance.

MSE Graduation Requirements

Graduation in materials science and engineering requires a minimum grade point average of 2.0 for all departmental courses.

Students also have opportunities for an Honors Concentration and/or a five year BS/MS program. See the Undergraduate Catalog for details and requirements.

UTRACK Milestones:

Term 1	**Term 2**	**Term 3**	**Term 4**	**Term 5**	**Term 6 through 8**
Math 130 or higher or one SS or one AH or one CC	Math 130 or higher	EF 151/157 or Physics 135/137	EF 152/158 or Physics 136/138	ME 202 or CS 102 or MSE 201 or CBE 201	No Milestones