## Materials Science & Engineering & Data Science, BS Curriculum Map

Students should use this curriculum map as a guide to have a more informed discussion with the departmental academic advisor when selecting courses.

Students not taking courses as advised may result in a delayed graduation date.

First Year		Second Year		Third Year		Fourth Year	
15 hrs	16 hrs	17 hrs	16 hrs	16 hrs	15 hrs	17 hrs	16 hrs
MSE 182 (2)	MSE 183 (1) <sup>2</sup>	MSE 201 (3)	MSE 206 (4)	MSE 307 (3) <sup>5</sup>	MSE 308 (3) <sup>5</sup>	MSE 404 (3) <sup>7</sup>	MSE 404 (3) <sup>7</sup>
MATH 221 (4) <sup>1</sup>	MATH 231 (3)	MATH 241 (4)	MATH 285 (3)	MSE 401 (3)	MSE 402 (3)	Topical Lecture (3) <sup>8</sup>	Topical Lecture (3)
CHEM 102 (3)	CHEM 104 (3)	MATH 257 (3)	ECE 205 (3)	MSE 406 (3)	MSE 304 or 405 (3)	MSE 494 (1)	MSE 495 (2)
CHEM 103 (1) <sup>2</sup>	CHEM 105 (1) <sup>2</sup>	PHYS 212 (4)	PHYS 214 (2)	CS 307 (4)	CS 277 (4)	IS 467 (3)	IS 477 (3)
ENG 100 (1) <sup>3</sup>	PHYS 211 (4)	Gen Ed Elect (3) <sup>5</sup>	STAT 207 (4)	Gen Ed Elect (3) <sup>5</sup>	Free Elect (2) <sup>6</sup>	Gen Ed Elect (3) <sup>5</sup>	Gen Ed Elect (3) <sup>5</sup>
RHET 105 (4) <sup>4</sup>	CS 107 (4) <sup>4</sup>					Free Elect (4) <sup>6</sup>	Free Elect (2) <sup>6</sup>

<sup>1</sup>MATH 220 may be substituted. MATH 220 is appropriate for students with no background in calculus. 4 of 5 credit hours count towards degree.

<sup>2</sup>Recommended, optional 1 credit courses, CHEM 103 General Chemistry Lab 1, CHEM 105 General Chemistry Lab II and MSE 183 Freshman Materials Laboratory. Credit hours count toward free electives.

<sup>3</sup>External transfers take ENG 300.

<sup>4</sup>RHET 105 (or an alternative Composition I sequence) is taken either in the first or second semester of the first year, according to the student's UIN (Spring if UIN is Odd). CS 107 Data Science Discovery is taken the other semester. Composition I guidelines can be found at http://catalog.illinois.edu/general-information/degree-general-education-requirements/ under Written Communication Requirement.

Seneral Education: Students must complete the Campus General Education requirements including the campus general education language requirement. MSE 307 and MSE 308 will satisfy technical core requirements and the Campus General Education Advanced Composition requirement. Choose a Humanities or Social/Behavioral Science course with Cultural Studies designation.

<sup>6</sup>Additional coursework, subject to the Grainger College of Engineering restrictions to Free Electives, so that there are at least 128 credit hours earned toward the degree (go.grainger.illinois.edu/FreeElectives). (Language other than English (3rd level) course.)

 $^{7}$ Each section of MSE 404 is 1.5 hours. Students take 2 unique sections of MSE 404 for 3 hours.

<sup>8</sup>To be selected from list of topical lecture courses approved by the department: http://catalog.illinois.edu/undergraduate/engineering/materials-science-engineering-bs/#degreerequirementstext.