## MATERIALS SCIENCE AND ENGINEERING (PH.D.)

Admission to this program is contingent upon admission to the Graduate School (http://bulletins.wayne.edu/graduate/general-information/admission/). Regular admission requires a 3.5 grade point average in the Master of Science degree or in the Bachelor of Science degree, from an accredited U.S. institution, and the written approval of the student's advisor (selected from the departmental faculty). Evaluation of admission credits is determined by the Department Graduate Officer.

A minimum of ninety credits beyond the Bachelor of Science degree is required in the Doctor of Philosophy program, including thirty credits in dissertation direction. The thirty credit dissertation registration requirement is fulfilled by registering for the courses MSE 9991, MSE 9992, MSE 9993, and MSE 9994 (Doctoral Dissertation Research and Direction I, II, III, and IV, respectively), in consecutive academic year semesters. Credit distribution must also include at least thirty credits in graduate courses numbered 7000 and above, including four core courses:

Code	Title	Credits
MSE 5650	Surface Science	3
MSE 7300	Advanced Thermodynamics	3
MSE 7400	Mechanical Behavior of Materials	3
CHM 7060	Materials Chemistry and Engineering	3
or PHY 6450	Introduction to Material and Device Characteriz	ations

Also required are: a qualifying examination, taken after the equivalent of one academic year of course work; an approved dissertation outline and prospectus; and a final oral examination, taken after the completion of the Ph.D. dissertation. Students should consult the Graduate School's regulations (http://bulletins.wayne.edu/graduate/general-information/degree-certificate-requirements/#doctoraldegreesphdtext) governing doctoral study.