

# Bachelor of Science in Materials Science & Engineering

## FOUR YEAR PLAN CHECKLIST FOR 2019-2020



BOISE STATE UNIVERSITY

COLLEGE OF ENGINEERING

Micron School of Materials Science and Engineering

### Year 1

✓	FALL SEMESTER Classes	Cr	✓	SPRING SEMESTER	Cr
	UF 100 Intellectual Foundations	3		FA, FH, or FS course	3
	CHEM 111, 111L General Chemistry I with Lab (FN)	4		CHEM 112, 112L General Chemistry II with Lab	4
	MATH 170 Calculus I (FM)	4		MATH 175 Calculus II	4
	ENGL 101 Introduction to College Writing (FW)	3		PHYS 211, 211L Physics I with Calculus and Lab (FN)	5
	SEMESTER TOTAL	14		SEMESTER TOTAL	16

### Year 2

✓	FALL SEMESTER Classes	Cr	✓	SPRING SEMESTER	Cr
	MATH 275 Multivariable and Vector Calculus	4		MATH 333 Differential Equations	4
	PHYS 212, 212L Physics II with Calculus and Lab	5		UF 200 Civic and Ethical Foundations	3
	MSE 245 Introduction to MSE	3		FC (Foundations in Oral Communication)	3
	ENGL 102 Intro to College Writing & Research (FW)	3		MSE 246 Materials for Society*	3
				MSE 150 Introduction to Computation for MSE	3
				MSE 280 Intro to Materials Lab Practice	1
	SEMESTER TOTAL	15		SEMESTER TOTAL	17

### Year 3

✓	FALL SEMESTER	Cr	✓	SPRING SEMESTER	Cr
	MSE 308 Thermodynamics of Materials*	3		MSE 318 Phase Transformations and Kinetics*	3
	MSE 312 Mechanical Behavior of Materials*	3		MSE 381 Materials Analysis Laboratory *	3
	MSE 380 Materials Properties Laboratory*	3		MSE 321 Structural Characterization*	3
	ENGR 210 Statics	3		PHYS 309, 309L Modern Physics with Lab	4
	MATH 360 Engineering Statistics	3		Technical emphasis elective	3
	SEMESTER TOTAL	15		SEMESTER TOTAL	16

### Year 4

✓	FALL SEMESTER	Cr	✓	SPRING SEMESTER	Cr
	MSE 415 Materials Processing*	3		MSE 410 Electrical Properties of Materials*	3
	MSE 480 Senior Project*	3		(FF) MSE 482 Senior Project II*	3
	MSE 498 Materials Science Seminar	1		Technical emphasis elective+	3
	ENGR 240 or ECE 210 Electrical Circuits	3		FA, FH, or FS course	3
	Technical emphasis elective+	3		FA, FH, or FS course	3
	FA, FH, or FS course	3			
	SEMESTER TOTAL	16		SEMESTER TOTAL	15

## Notes

- Courses with an asterisk (\*) are offered only in the semester in which they are listed.
- **FOUNDATIONS COURSES.** In addition to named specific courses, students need to take one FC (foundations in oral communication), one FA, one FH, and two FS courses. FS courses must come from two different fields as stated in the [University General Education Requirements](#)
- **TECHNICAL EMPHASIS ELECTIVE (+):** Students must complete 9 credits of technical emphasis – courses that are related to one another and which support the student's MSE degree. The emphasis area and courses must be pre-approved by the advisor.
- **GRADE POLICY:** A C- or above is required for all prerequisite courses & for all upper division courses in the student's major.

## Questions? Contact us

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