UCLA CHEMISTRY-MATERIALS SCIENCE MAJOR 2015-2016

CHEMISTRY-MATERIALS SCIENCE MAJOR (B.S.): This major is designed primarily for students who are interested in chemistry with an emphasis on material properties. The major provides appropriate preparation for graduate studies in fields emphasizing interdisciplinary research involving chemistry, engineering, and applied science. Refer to the UCLA General Catalog (www.registrar.ucla.edu/catalog) for course descriptions and requisites.

For more details about this major and others offered in the Department of Chemistry and Biochemistry, consult the Undergraduate Office in 4006 Young Hall.

Preparation for the Major	
General Chemistry (CHEM)	20A(H), 20B(H), 20L, 30AL
Organic Chemistry (CHEM)	30A(H)
Math (MATH)	31A, 31B, 32A, 32B, 33B
Physics (PHYSICS)	1A(H), 1B(H), 1C(H), 4BL

(H) indicates that an Honors section may be available

Upper Division Major Requirements	
Chemistry (CHEM)	110A, 113A, 171*, 185, [172^{+} OR C180^{+} OR C181^{+}]
One Chemistry Elective (Choose One)	110B, C113B, 172^{+}, C174, C175, C176, C180^{+}, C181^{+}
Materials Science & Engineering (MAT SCI)	104, 110, 110L, 120, 131, [121^{+} OR 150^{+} OR 160^{+}]
Two Materials Science & Engineering Electives (MAT SCI) (8 units)	C111, 121^{+}, 122, 132, 150^{+}, 160^{+}, 162, CM180
Laboratory Electives (1 CHEM & 1 MAT SCI) (7 units)	Chemistry 114, 184; Materials Science & Engineering 121L, 131L, 161L

\+ Course may only be applied once to the major
[ ] Pick one course enclosed in brackets

* You will be allowed to enroll in CHEM 171 as a Chemistry-Materials Science Major without having taken CHEM 30B.

Important Notes

- You must have a minimum of 180 units to graduate, and 60 of those units must be upper division (courses numbered 100 to 199).
- The Chemistry-Materials Science B.S. Upper Division Major Requirements satisfy at least 58 upper division units.
- All Preparation for the Major and Upper Division Major courses must be taken for a letter grade.
- Seminars, individual study courses, and research courses (e.g. 196, 199) may not be used to satisfy the requirements for the Chemistry-Materials Science major.
- You must have a 2.0 GPA in the major to graduate with a degree. If you fall below a 2.0 GPA in the major, it is strongly recommended that you change majors.
- You may not take or repeat a chemistry or biochemistry course for credit if it is a prerequisite for a more advanced course for which you already have credit.

UCLA CHEMISTRY-MATERIALS SCIENCE MAJOR 2015-2016 – Sample Major Course Plans

INCOMING FRESHMEN

FRESHMAN YEAR

FALL	WINTER	SPRING
CHEM 20A (4)	CHEM 20B (4)	CHEM 30A (4)
MATH 31A (4)	CHEM 20L (3)	MATH 32A (4)
	MATH 31B (4)	

SOPHOMORE YEAR

FALL	WINTER	SPRING
PHYSICS 1A (5)	PHYSICS 1B (5)	PHYSICS 1C (5)
MATH 32B (4)	MATH 33B (4)	PHYSICS 4BL (2)
		MAT SCI 104 (4)

JUNIOR YEAR

FALL	WINTER	SPRING
CHEM 110A (4)	CHEM 113A (4)	CHEM 172 (4)
CHEM 171 (4)	MAT SCI 120 (4)	CHEM 110B (4)
MAT SCI 110 (4)	MAT SCI 131 (4)	MAT SCI 121 (4)
MAT SCI 110L (2)		MAT SCI 121L (2)

SENIOR YEAR

FALL	WINTER	SPRING
CHEM 114 (5)	MAT SCI 150 (4)	CHEM 185 (5)
	MAT SCI C111 OR 122 (4)	

(Numbers in parentheses indicate the number of units.)

Important Notes

- This plan is just one EXAMPLE of how to schedule classes to graduate in 4 years. Other schedules may be equally valid.
- This plan only includes required courses for the Preparation for the Major and the Upper Division Major Requirements.
- **This plan does not include General Education and other College requirements.** For these requirements, please consult with your College Advising Unit (College Academic Counseling, AAP, Honors, Athletics).
- Be sure to check your Degree Audit Report (DAR) frequently to ensure you are meeting all degree requirements.

TRANSFER STUDENTS

JUNIOR YEAR

FALL	WINTER	SPRING
MAT SCI 104 (4)	CHEM 110A (4)	CHEM 172 (4)
CHEM 171 (4)	CHEM 113A (4)	CHEM 110B (4)
	MAT SCI 122 (4)	

SENIOR YEAR

FALL	WINTER	SPRING
CHEM 114 (5)	MAT SCI 120 (4)	CHEM 185 (5)
MAT SCI 110 (4)	MAT SCI 131 (4)	MAT SCI 121 (4)
MAT SCI 110L (2)	MAT SCI 150 (4)	MAT SCI 121L (2)

(Numbers in parentheses indicate the number of units.)

Important Notes

- This plan is just one EXAMPLE of how to schedule classes to graduate in 2 years. Other schedules may be equally valid.
- Assuming that incoming transfer students have already completed the Preparation for the Major, this plan only includes required courses for the Upper Division Major Requirements.
- **This plan does not include General Education and other College requirements.** For these requirements, please consult with your College Advising Unit (College Academic Counseling, AAP, Honors, Athletics).
- Be sure to check your Degree Audit Report (DAR) frequently to ensure you are meeting all degree requirements.

Courses may not always be taught in the quarter shown. Check with the Chemistry/Biochemistry Department for the most current list of projected course offerings.