

## GE Course requirement breakdown for School of Engineering

Lower Division Common Course Requirement				Upper Division Common Course Requirement				Approaches to Knowledge					
Can not double count courses within categories per major													
	SPARKS Seminar	Written Communication	Quantitative Reasoning	Language	Crossroads	Culminating Experience	Writing in the Discipline	Natural Science	Engineering Science	Natural or Engineering Science	Social Science	Social Science, Arts, and Humanities	Arts and Humanities
BIOE	Sparks seminar (required course)	Wri 010 (required course)	Math 021 (required course)	BioE 021 (required course)	BioE 113 (required course) or BioE 135 (required course)	Engr 194 (required course)	BioE 113 (required course)	Math 022 (required course)	BioE 045 (required course)	Phys 008 (required course)	<a href="#">a course from the Social Science list</a>	<a href="#">a course from Arts and Humanities list</a>	<a href="#">a course from this list</a>
CSE	Sparks seminar (required course)	Wri 010 (required course)	Math 021 (required course)	CSE 020 (required course)	CSE 100 (required course)	CSE 120 (required course)	<a href="#">CSE 155 (technical elective) or Engr 197 or from this list</a>	Math 022 (required course)	CSE 015 (required course)	Phys 008 (required course)	<a href="#">a course from the Social Science list</a>	<a href="#">a course from Arts and Humanities list</a>	<a href="#">a course from this list</a>
ENVE	Sparks seminar (required course)	Wri 010 (required course)	Math 021 (required course)	ME 021 (required course)	<a href="#">ENVE 164 (technical elective) or Engr 180 (technical elective) or from this list</a>	Engr 194 (required course)	<a href="#">Engr 151 (Engr fundamental option) or Engr 197 or from this list</a>	Math 022 (required course)	Engr 130 (required course)	Phys 008 (required course)	<a href="#">a course from the Social Science list</a>	<a href="#">a course from Arts and Humanities list</a>	<a href="#">a course from this list</a>
ME	Sparks seminar (required course)	Wri 010 (required course)	Math 021 (required course)	ME 021 (required course)	Math 131 (required course)	Engr 194 (required course)	Engr 151 (required course)	Math 022 (required course)	ME 120 (required course)	Phys 008 (required course)	<a href="#">a course from the Social Science list</a>	<a href="#">a course from Arts and Humanities list</a>	<a href="#">a course from this list</a>
MSE	Sparks seminar (required course)	Wri 010 (required course)	Math 021 (required course)	ME 021 or CSE 021 or BioE 021 (required course)	<a href="#">ENGR 197 or course from this list</a>	Engr 194 (required course)	Engr 151 (required course)	Math 022 (required course)	Engr 130 (required course)	Phys 008 (required course)	<a href="#">a course from the Social Science list</a>	<a href="#">a course from Arts and Humanities list</a>	<a href="#">a course from this list</a>

\* Snap Shot as of 8/14/19

\* For Accurate courses that fulfill GE and Badges go to

[ge.ucmerced.edu](http://ge.ucmerced.edu)

## Experience Badge Breakdown for School of Engineering

	Scientific Method	Literary and Textual Analysis	Media and Visual Analysis	Quantitative and Numerical Analysis	Societies and Cultures of the Past	Diversity and Identity	Global Awareness	Sustainability	Practical and Applied Knowledge	Ethics	Leadership, Community, and Engaging the World	AT LEAST 3 UPPER DIVISION COURSES
ONE COURSE OR EXPERIENCE CAN SATISFY A MAXIMUM OF TWO BADGES												
BIOE	Completed with Major Requirements	Completed with Major Requirements	Completed with Major Requirements	Completed with Major Requirements	<a href="https://ge.ucmerced.edu/intellectual-experience-badges/societies-and-cultures-past">https://ge.ucmerced.edu/intellectual-experience-badges/societies-and-cultures-past</a>	<a href="https://ge.ucmerced.edu/intellectual-experience-badges/diversity-and-identity">https://ge.ucmerced.edu/intellectual-experience-badges/diversity-and-identity</a>	<a href="https://ge.ucmerced.edu/intellectual-experience-badges/global-awareness">https://ge.ucmerced.edu/intellectual-experience-badges/global-awareness</a>	Completed with Major Requirements	Completed with Major Requirements	Completed with Major Requirements	Completed with Major Requirements	Completed with Major Requirements
CSE	Completed with Major Requirements	<a href="https://ge.ucmerced.edu/intellectual-experience-badges/literary-and-textual-analysis">https://ge.ucmerced.edu/intellectual-experience-badges/literary-and-textual-analysis</a>	ENGR 158 (technical elective), Engr 180 (technical elective)  <a href="https://ge.ucmerced.edu/intellectual-experience-badges/media-and-visual-analysis">https://ge.ucmerced.edu/intellectual-experience-badges/media-and-visual-analysis</a>	Completed with Major Requirements	<a href="https://ge.ucmerced.edu/intellectual-experience-badges/societies-and-cultures-past">https://ge.ucmerced.edu/intellectual-experience-badges/societies-and-cultures-past</a>	<a href="https://ge.ucmerced.edu/intellectual-experience-badges/diversity-and-identity">https://ge.ucmerced.edu/intellectual-experience-badges/diversity-and-identity</a>	Engr 175 (technical elective), Engr 180 (technical elective), ESS 001 (optional engr sci), BIO 043 (optional engr sci) or  <a href="https://ge.ucmerced.edu/intellectual-experience-badges/global-awareness">https://ge.ucmerced.edu/intellectual-experience-badges/global-awareness</a>	Bio 043 (optional engr Sci), Engr 180 (technical elective)  <a href="https://ge.ucmerced.edu/intellectual-experience-badges/sustainability">https://ge.ucmerced.edu/intellectual-experience-badges/sustainability</a>	Completed with Major Requirements	Bio 043 (optional engr sci), Bio 047 (optional engr sci), CSE 155 (technical elective), Engr 175 (technical elective), ENGR 097/197 or  <a href="https://ge.ucmerced.edu/intellectual-experience-badges/ethics">https://ge.ucmerced.edu/intellectual-experience-badges/ethics</a>	<a href="https://ge.ucmerced.edu/intellectual-experience-badges/leadership-community-and-engaging-world">https://ge.ucmerced.edu/intellectual-experience-badges/leadership-community-and-engaging-world</a>	Will need to be monitored
ENVE	Completed with Major Requirements	<a href="https://ge.ucmerced.edu/intellectual-experience-badges/literary-and-textual-analysis">https://ge.ucmerced.edu/intellectual-experience-badges/literary-and-textual-analysis</a>	Engr 180 (technical elective)  <a href="https://ge.ucmerced.edu/intellectual-experience-badges/media-and-visual-analysis">https://ge.ucmerced.edu/intellectual-experience-badges/media-and-visual-analysis</a>	Completed with Major Requirements	<a href="https://ge.ucmerced.edu/intellectual-experience-badges/societies-and-cultures-past">https://ge.ucmerced.edu/intellectual-experience-badges/societies-and-cultures-past</a>	<a href="https://ge.ucmerced.edu/intellectual-experience-badges/diversity-and-identity">https://ge.ucmerced.edu/intellectual-experience-badges/diversity-and-identity</a>	ESS 001 (option engr sci) or  <a href="https://ge.ucmerced.edu/intellectual-experience-badges/global-awareness">https://ge.ucmerced.edu/intellectual-experience-badges/global-awareness</a>	Completed with Major Requirements	Completed with Major Requirements	ENVE 164 (technical elective), ENGR 097/197 or  <a href="https://ge.ucmerced.edu/intellectual-experience-badges/ethics">https://ge.ucmerced.edu/intellectual-experience-badges/ethics</a>	Completed with Major Requirements	Will need to be monitored
ME	Completed with Major Requirements	ME 144 (technical elective)  <a href="https://ge.ucmerced.edu/intellectual-experience-badges/literary-and-textual-analysis">https://ge.ucmerced.edu/intellectual-experience-badges/literary-and-textual-analysis</a>	<a href="https://ge.ucmerced.edu/intellectual-experience-badges/media-and-visual-analysis">https://ge.ucmerced.edu/intellectual-experience-badges/media-and-visual-analysis</a>	Completed with Major Requirements	<a href="https://ge.ucmerced.edu/intellectual-experience-badges/societies-and-cultures-past">https://ge.ucmerced.edu/intellectual-experience-badges/societies-and-cultures-past</a>	<a href="https://ge.ucmerced.edu/intellectual-experience-badges/diversity-and-identity">https://ge.ucmerced.edu/intellectual-experience-badges/diversity-and-identity</a>	ESS 001 (optional engr sci), BIO 043 (optional engr sci) or  <a href="https://ge.ucmerced.edu/intellectual-experience-badges/global-awareness">https://ge.ucmerced.edu/intellectual-experience-badges/global-awareness</a>	Completed with Major Requirements	Completed with Major Requirements	ENGR 097/197 or  <a href="https://ge.ucmerced.edu/intellectual-experience-badges/ethics">https://ge.ucmerced.edu/intellectual-experience-badges/ethics</a>	Completed with Major Requirements	Will need to be monitored
MSE	Completed with Major Requirements	<a href="https://ge.ucmerced.edu/intellectual-experience-badges/literary-and-textual-analysis">https://ge.ucmerced.edu/intellectual-experience-badges/literary-and-textual-analysis</a>	<a href="https://ge.ucmerced.edu/intellectual-experience-badges/media-and-visual-analysis">https://ge.ucmerced.edu/intellectual-experience-badges/media-and-visual-analysis</a>	Completed with Major Requirements	<a href="https://ge.ucmerced.edu/intellectual-experience-badges/societies-and-cultures-past">https://ge.ucmerced.edu/intellectual-experience-badges/societies-and-cultures-past</a>	<a href="https://ge.ucmerced.edu/intellectual-experience-badges/diversity-and-identity">https://ge.ucmerced.edu/intellectual-experience-badges/diversity-and-identity</a>	ESS 001 (option engr sci) or  <a href="https://ge.ucmerced.edu/intellectual-experience-badges/global-awareness">https://ge.ucmerced.edu/intellectual-experience-badges/global-awareness</a>	Completed with Major Requirements	Completed with Major Requirements	<a href="https://ge.ucmerced.edu/intellectual-experience-badges/ethics">https://ge.ucmerced.edu/intellectual-experience-badges/ethics</a>	Completed with Major Requirements	Will need to be monitored