The University of Akron

Department of Chemical and Biomolecular Engineering
B.S. Corrosion Engineering with Co-op 425005BS

Updated: 12/17/2018

RECOMMENDED SCHEDULE
Official course requirements based upon semester admitted into the program.

ENTERING FALL 2018

First Year

Fall			Spring			Summer		
3150:151	^Principles of Chemistry I	3	3150:153	^Principles of Chemistry II	3			
3150:152	Principles of Chem I Lab	1	3150:154	Qualitative Analysis	2			
3300:111	~^English Composition I	3	3450:222	^Analytic Geometry-Calculus II	4			
3450:221	^Analytic Geometry-Calculus I	4	4250:105	Corrosion Engineering Computations	2			
4200:110	Proj. Management & Teamwork I	1		*General Ed or Honors Distribution	3			
4250:101	Tools for Corrosion Engineering	2		˚^2nd Writing Course	3			
		14			**17**			

Second Year

Fall			Spring			Summer		
3150:263	Organic Chemistry I	3	3150:264	Organic Chemistry II	3			
3150:265	Organic Chemistry Lab	2	3450:335	Intro. To Ordinary Differential Equations	3		***Possible***	
3450:223	^Analytic Geometry-Calculus III	4	3650:292	^Elementary Classical Physics II	4	4100:300	*Cooperative Education Work Period*	
3650:291	^Elementary Classical Physics I	4	4200:225	Equilibrium Thermodynamics	4			
4200:210	Proj. Management & Teamwork II	1	4200:305	Materials Science	2			
4250:200	Material & Energy Balances for Corrosion Eng.	4						
		18			**16**			

Third Year

Fall			Spring			Summer		
4200:310	Proj. Management & Teamwork III	1				4300:202	Mechanics of Solids	3
4200:321	Transport Phenomena	3					*General Ed or Honors Distribution	3
4250:300	Fundamentals Of Aqueous Corrosion	3	4100:301	Cooperative Education Work Period			*General Ed or Honors Distribution	3
4250:301	Corrosion Lab I	1						
4300:201	^Statics	3						
4400:307	Basic Electrical Engineering	4						
		15						**9**

Fourth Year

Fall			Spring			Summer		
			3150 or 3100: xxx	Chemistry or Biology Elective	3			
			3150:424	Analytical Chemistry II	3			
4100:302	Cooperative Education Work Period		3250:244	Intro. to Economic Analysis	3	4100:403	Cooperative Education Work Period	
			4250:305	Aqueous Corrosion Prevention	3			
			4250:306	Aqueous Corrosion Lab II	1			
				*General Ed or Honors Distribution	3			
					16			

Fifth Year

Fall			Spring			Summer		
4200:410	Proj. Management & Teamwork IV	1	4250:441	Corrosion Management II	3			
4250:310	Fundamentals of High Temp Corrosion	3	4250:xxx	Corrosion Engineering Elective	3			
4250:311	High Temp Corrosion Lab	1	4xxx:xxx	Design Electives	3			
4250:440	Corrosion Management I	3	4xxx:xxx	Design Electives	3			
4250:xxx	Corrosion Engineering Elective	3		*General Ed or Honors Distribution	3			
	*General Ed or Honors Distribution	3						
		14			**15**			

College of Engineering Notes

*Credit hours shown for General Education or Honors Distribution are general guidelines only. These courses should be chosen in accordance with the appropriate General Education curriculum guide (for non-honors students) or Honors Distribution (for honors students). Honors students must also ensure that their course selections meet additional requirements not shown on this curriculum guide.

Gen Ed Program - https://www.uakron.edu/general-education/ Honors Distribution - https://www.uakron.edu/honors/curriculum/

^Honors sections may be available; check the schedule of classes.

Chemical Engineering Program Notes

See Chemical and Biomolecular Engineering Departmental advisors for approved chemical engineering electives

~The Chemical and Biomolecular Engineering Department recommends that English Composition I be used to satisfy writing course requirement but other choices are available. See the General Education Program for details.

˚Check General Education Program or Honors Distribution to find courses that satisfy the 2nd writing course requirement.

In addition to meeting all other degree requirements, a minimum of 136 credits must be completed.