Curriculum

❒ Graduate Course

Classification		Subject No.	Subject Name	Lecture:Lab.:Credit (Homework)	Semester	Remark
General Course	Mand-atory	CC010	Special Lecture on Leadership	1:0:0	Fall	
		CC020	Ethics and Safety I	1AU	Spring · Fall	
	Choose 1	CC500	Scientific Writing	3:0:3(4)	Spring · Fall	
		CC510	Introduction to Computer Application	2:3:3(10)	Spring · Fall	
		CC511	Probability and Statistics	2:3:3(6)	Spring · Fall	
		CC512	Introduction to Materials and Engineering	3:0:3(3)	Spring · Fall	
		CC513	Engineering Economy and Cost Analysis	3:0:3(6)	Fall	
		CC522	Introduction to Instruments	2:3:3(8)	Fall	
		CC530	Enterpreneurship and Business Strategies	3:0:3(3)	Fall	
		CC531	Patent Analysis and Invention Disclosure	3:0:3(3)	Spring · Fall	
		CC532	Collaborative System Design and Engineering	4:0:4	Spring	
Mandatory Major Course		PSE501	Polymer Materials	3:0:3(3)	Spring	
		CBE552	Polymer Processing	3:0:3(3)	Fall	
		CBE556	Structure and Properites of Macromolecules	3:0:3(3)	Spring	
		CBE554	Polymer Physics	3:0:3(3)	Spring	
		CBE651	Multicomponent Polymer Materials	3:0:3(1)	Fall	
		CH671	Organic Chemistry of High Polymers	3:0:3(3)	Spring · Fall	
Elective Major Course		PSE511	Reactions of Polymers	3:0:3(3)	Fall	
		PSE512	Surface and Interface Properties of Polymers	3:0:3(3)	Fall	
		CH522	Organic Synthesis I	3:0:3(3)	Spring	
		CBE533	Fundamentals of Microstructure Fluid Flow	3:0:3(4)	Spring · Fall	
		MAE537	Optimal design of Composite Structures	3:0:3(6)	Spring	
		CH542	Organometallic Chemistry	3:0:3(3)	Fall	
		MS542	Nanoscale Surface Analysis	2:3:3(3)	Fall	
		MS544	Engineering of Soft Materials	3:0:3(3)	Fall	
		CBE551	Polymer Rheology	3:0:3(3)	Spring · Fall	
		CBE555	Biopolymer	3:0:3(3)	Fall	
		CBE573	Fuel Cell Processes and Materials	3:0:3(3)	Fall	
		BS584	Novel Drug Delivery Systems	3:0:3(3)	Fall	
		MS613	Solid State Physics	3:0:3(3)	Fall	
		MS620	Optical Materials	3:0:3(3)	Spring	*MAE633
		MS642	Electronic Packaging Technology	3:0:3(2)	Spring	
		IE643	Design and Analysis of Experiments	3:1:3(4)	Fall	
		CBE652	Polymer Characterization	3:0:3(3)	Spring	
		CBE653	Mechanical Properties of Polymers	3:0:3(4)	Spring · Fall	
		MS670	Sol-Gel Nano Materials and Process	3:0:3(3)	Fall	
		CH672	Specialty Polymer Chemistry	3:0:3(3)	Spring · Fall	
		CH673	Polymer Physical Chemistry	3:0:3(3)	Spring · Fall	
		CH674	Organic Electronic Materials	3:0:3(3)	Spring	
		CH675	Introduction to Lithography	3:0:3(3)	Spring	
		CBE682	Organic Nano-Structured Materials	3:0:3(3)	Fall	
		MS684	Principles of Semiconductor Devices	3:0:3(3)	Spring	
		PSE711	Special Topics in Polymer Materials I	3:0:3(3)	Spring · Fall	

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Elective Major Course	PSE712	Special Topics in Polymer Materials II	3:0:3(3)	Spring · Fall	
	CBE731	Polymer Fluid Dynamics	3:0:3(3)	Spring · Fall	
	CBE751	Advanced Rheology of Polymer	3:0:3(3)	Spring · Fall	*MAE633
	CH773	Special Topics in Polymers Chemistry I	3:0:3(3)	Spring · Fall	
	CBE851	Special Topics in Polymer Engineering	3:0:3(3)	Spring · Fall	
Research	PSE960	Thesis (Master Student)		Spring · Fall	
	PSE966	Seminar (Master Student)	1:0:1	Spring · Fall	
	PSE980	Thesis (Ph.D. Student)		Spring · Fall	
	PSE986	Seminar (Ph.D. Student)	1:0:1	Spring · Fall	

※ * Substitute course

500-level courses are open to undergraduate students.