NANOSCIENCE & MICROSYSTEMS ENGINEERING

Master of Science in NanoScience and MicroSystems Engineering (MS NSME)
Plan I - Thesis
Shared Credit Program with B.S.Ch.E.
Department of NanoScience & MicroSystems Engineering

Junior Year - Undergraduate Degree					
SPRING SEMESTER					
Semester/Year	**Course**	**Title**	**Hours**	**Grade**	**Applied toward BSCHE?**
	CBE 501	Chemical & Biological Engineering Seminar	1		
		Total Semester Hours:	**1**		

Senior Year - Undergraduate Degree					
FALL SEMESTER					
Semester/Year	**Course**	**Title**	**Hours**	**Grade**	**Applied toward BSCHE?**
FA	CBE 586	Introduction to Statistics and Design of Experiments	3		
		Total Semester Hours:	**3**		
SPRING SEMESTER					
Semester/Year	**Course**	**Title**	**Hours**	**Grade**	**Applied toward BSCHE?**
	NSMS 595	ST: NSME-BME-CBE Cohort Seminar	1		
		Technical Elective(1)	3		
		Total Semester Hours:	**4**		

First Year - MS in Chemical Engineering					
FALL SEMESTER					
Semester/Year	**Course**	**Title**	**Hours**	**Grade**	**Applied toward BSCHE?**
	NSMS 550	Social and Ethical Issues in Nanotechnology	1		
FA	CBE 502	Chemical & Biological Engineering Research Practices	3		
FA	NSMS 512	Characterization Methods for Nanostructures	3		
FA	NSMS 574L	Microelectronics Processing(2)	3		
FA	NSMS 518	Synthesis of Nanostructures	3		
FA	NSMS 599	Master's Thesis	3		
		Total Semester Hours:	**16**		
SPRING SEMESTER					
Semester/Year	**Course**	**Title**	**Hours**	**Grade**	**Applied toward BSCHE?**
SP	NSMS 510	Chemistry and Physics at the Nanoscale	3		
SP	NSMS 519	Theory, Fabrication, and Characterization of NEMS/MEMS(2)	3		
	NSMS 599	Master's Thesis	3		
		Total Semester Hours:	**9**		
		Total Hours for MSCHE:	**30**		

(1) Technical electives are chosen with consultation of your advisor.

(2) Students can choose to take either NSME 574L or NSME 519 to fulfill the topdown fabrication course requirement.