

Name:

\_ UNM ID #:\_\_\_\_\_

Planned MS Graduation Date:\_\_\_\_

Please use the following form to plan out the 30 hours of graduate credit that will count toward your Master's Degree. Check the courses you plan to take and indicate the semester and year you plan to take them. The "TOTAL" box should add up to **30**. You can change your selections later on without penalty. If you are planning to take a course while an undergrad, note it in the "Taken as UG?" box on the right. A maximum of 18 hours of graduate credit can be taken while you are in UG status.

Required Core Courses					
Semester/Year	Course	Title	Hours	Taken as UG?	Notes
SP	BME 547	BME Research Practices	3		
FA	BME 558	Methods of Analysis	3		
	BME 567	Biomedical Engineering Seminar*	1		
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At this time, BME offers the following two educational emphasis areas (or "tracks") for MS students: 1) Molecular and Cellular Systems, and 2) Biomaterials, Biomechanics and Tissue Engineering. Two concentrations are also available for MS students: 1) Bioinformatics, and 2) Entrepreneurship and Technology Management. Students are encouraged, but not required, to pick a track or concentration. For more details on the core courses for each track/concentration, please visit BME's curriculum website <u>here.</u>

Biomedical Engineering Electives					
Semester/Year	Course	Title	Hours	Taken as	Notes
FA	BME 517	Applied Biology for Biomedical Engineers	3	001	
FA	BME 518	Introduction to Bioinformatics	3		
SP	BME 544	Thermodynamics of Biological Systems	3		
SP	BME 556	Protein and Nucleic Acid Engineering	3		
SP	BME 568	Computational Modeling for Bioengineering	3		
FA	BME 572	Biomaterials Engineering	3		
FA	BME 575	Biomechanics	3		
SP	BME 579	Tissue Engineering	3		
SP	BME 581	Colloidal Nanocrystals for Biomedical Applications	3		
	BME 598	Special Topics	1-3		

Additional Technical Electives					
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Semester/Year	Course	Title	Hours	Taken as UG?	Notes
FA	BIOM 507	Advanced Molecular Biology	4		
SP	BIOM 510	Physiology	3		
SP	BIOM 515	Cancer Biology	3		
FA	CBE 512	Characterization Methods for Nanostructures	3		
	CBE 515	Special Topics	3		
FA	CBE 521	Advanced Transport Phenomena I	3		
SP	CBE 530	Surface and Interfacial Phenomena	3		
	CBE 551	Problems**	1-3		
SP	CBE 561	Kinetics of Chemical Processes	3		

FA	CBE 586	Introduction to Statistics and Design of Experiments***	3	
FA	CS 521	Data Mining Techniques	3	
FA	CS 527	Principles of Artificially Intelligent Machines	3	
SP	CS 529	Introduction to Machine Learning	3	
FA	CS 530	Geometric and Probabilistic Methods in Computer Science	3	
FA	CS 561	Algorithms/Data Structure	3	
SP	CS 564	Introduction to Database Management	3	
FA	CS 567	Principles and Applications of Big Data	3	

		Other Electives			
		Not listed above			
Semester/Year	Course	Title	Hours	Taken as UG?	Notes

TOTAL\*\*\*\*

Refer to course catalog to plan which semester you will take the courses listed above

\*Students are expected to sign up for seminar each semester. Up to 4 credit hours may be applied to the MS degree

\*\*Problems credits may be taken in units of 1, 2, or 3 credits per semester. Maximum of 3 problem credits for this program \*\*\*Undergraduates from CBE must take the 586 version of CBE 486/586 to receive graduate credit for this course

\*\*\*\*Minimum total credits for Plan III (coursework only) MS degree is 30

Comments/Notes		