Bachelor of Science in Financial Engineering

	Course Name	Course Title	Fall	Spring
Year 1	*Take one of the following:*			
	CLS 101US	Knowledge and Community	3	
	COMX 111US	Introduction to Public Communication	3	
	CSCI 127	The Joy and Beauty of Data	4	
	ECNS 251IS*	Honors Economics		4
	EFIN 101	Introduction to Financial Engineering		1
	Elective	University Core Elective (D, IA, IH)	6	
	M 171Q	Calculus I	4	
	M 172Q	Calculus II		4
	PHSX 220	Physics I		4
	WRIT 101W**	College Writing I		3
			17	**16**
Year 2	CHMY 141	College Chemistry I		4
	CSCI 132	Basic Data Structures and Algorithms	4	
	CSCI 232	Data Structures and Algorithms		4
	ECNS 301	Intermediate Microeconomics with Calculus		3
	ECNS 313	Money & Banking	3	
	Take one of the following:			
	ECNS 345	Econ Org, Fin, & Credit	3	
	EGEN 325	Engineering Economic Analysis	3	
	M 221	Introduction to Linear Algebra	3	
	M 273Q	Multivariable Calculus	4	
	M 274	Introduction to Differential Equations		4
			17	**15**
Year 3	ECNS 309	Managerial Economics	3	
	ECNS 406	Industrial Organization	3	
	EFIN 301	Engineering & Economic Financial Management I		3
	EIND 300	Engineering Management & Ethics	3	
	EIND 354	Engineering Probability and Statistics I	3	
	EIND 364	Principles of Operations Research I	3	
	EIND 373	Production Inventory Cost Analysis		3
	EIND 457	Regression & Multivariate Analysis for Engineers		3
	EIND 464	Principles of Operations Research II		3
	Technical Elective			3
			15	**15**
Year 4	Elective	University Core Elective (D, IA, IH)		3
	ECNS 461	Econometrics I	3	
	EFIN 401	Engineering & Economic Financial Management II	3	
	EFIN 499R	Financial Engineering Senior Project		3
	EIND 468	Managerial Forecasting & Decision Analysis	3	
	Professional Electives		3	6
	Technical Electives		3	3
			15	**15**

* May substitute ECNS 202 and ECNS 204IS. Students with no prior Economics background are recommended to take ECNS 101 prior to ECNS 202 or ECNS 251.

** Students exempt from MSU's writing requirement should substitute another writing course such as WRIT 201, WRIT 221, HONR 201US, or HONR202IH.

Professional Electives: BFIN 420R, BFIN 435, BFIN 452, BFIN 456, BFIN 458, BFIN 460, BFIN 466, ECNS 314, ECNS 403R, ECNS 432R, EGEN 310R, EIND 425, EIND 434, ECNS/EGEN 492. *Note:* May substitute EIND 373 and ECNS 345 for BFIN 322 prerequisite, and substitute ECNS 313 for BFIN 357 prerequisite.

Technical Electives: CSCI 440, CSCI 446, CSCI 447, ECNS 501, ECNS 502, ECNS 562, EIND 422, EIND 458, EIND 477, ESOF 322, ESOF 422, ESOF 522, M441, STAT 408, STAT 421.

A minimum of 125 credits is required for graduation; 42 of these credits must be in courses numbered 300 or above.