

EUI - Computer Engineering Study Plan						
Year 1 - Semester 1						
Course Code	Course Name	Credits	Hours		Requisites	
			Lect.	Ex./Lab	Co	Pre
HUM 011	English Language	3	2	2		
ENG 011	Transforming Ideas to Innovation I	2	1	2		
PHM 011	Analytic Geometry and Calculus I	4	3	2		
PHM 031	Modern Mechanics	4	3	2		
CSE 021	Introduction to Computer Programming	3	2	2		

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Year 1 - Semester 2						
Course Code	Course Name	Credits	Hours		Requisites	
			Lect.	Ex./Lab	Co	Pre
HUM 012	Fundamentals of Speech Communication	3	2	2		
ENG 012	Transforming Ideas to Innovation II	2	1	2		ENG 011
PHM 012	Analytic Geometry and Calculus II	4	3	2		PHM 011
PHM 041	General Chemistry	4	3	2		
PHM 221	Electric and Magnetic Interactions	4	3	2	PHM 012	PHM 031

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Year 2 - Semester 1						
Course Code	Course Name	Credits	Hours		Requisites	
			Lect.	Ex./Lab	Co	Pre
PHM 112	Ordinary Differential Equations	3	2	2		PHM 012
ECE 101	Electrical Engineering Fundamentals I	3	2	2	PHM 111	PHM 031
ECE 102	Electrical Engineering Fundamentals I Lab	1	0	2	ECE 101	
ECE 115	Digital Systems Design	4	2	4		
CSE 121	Advanced Programming	3	2	2		CSE 021
CSE 181	Computer Engineering Sophomore Seminar	1	1	1		

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Year 2 - Semester 2						
Course Code	Course Name	Credits	Hours		Requisites	
			Lect.	Ex./Lab	Co	Pre
HUM 221	Communication, Information and Society	3	2	2		
PHM 113	Linear Algebra	3	2	2	PHM 012	
ECE 103	Electrical Engineering Fundamentals II	3	2	2	PHM 112	ECE 101
ECE 104	Electrical Engineering Fundamentals II Lab	1	0	2	ECE 103	
CSE 122	Object-Oriented Programming	3	2	2		
CSE 123	Data Structures and Algorithms	3	2	2		

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Year 3 - Semester 1						
Course Code	Course Name	Credits	Hours		Requisites	
			Lect.	Ex./Lab	Co	Pre
PHM 111	Multivariate Calculus	4	3	2		PHM 012
PHM 114	Discrete Mathematics	3	2	2		PHM 113
PHM 212	Probability & Statistics	3	2	2		PHM 112
ECE 231	Signals and Systems	3	2	2		ECE 101, PHM 112
CSE 221	(A) Design and Analysis of Algorithms	3	2	2	PHM 114	CSE 123

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Year 3 - Semester 2						
Course Code	Course Name	Credits	Hours		Requisites	
			Lect.	Ex./Lab	Co	Pre
PHM 211	(S) Numerical Computations	3	2	2		PHM 113
ENG 231	(B) Operations Research & Optimization	3	2	2		PHM 113
CSE 231	Microprocessor Systems and Interfacing	4	2	4		CSE 021, ECE 115
CSE 222	(A) Computer Graphics	3	2	2		PHM 113, CSE 123
CSE 271	Data Science Methodology	3	2	2		CSE 021

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Year 4 - Semester 1						
Course Code	Course Name	Credits	Hours		Requisites	
			Lect.	Ex./Lab	Co	Pre
HUM 211	Technical Writing	3	2	2		
PHM 311	(S) Statistics for Data Science	3	2	2		PHM 212
CSE 331	Computer Architecture	3	2	2		CSE 231
CSE 351	Introduction to Artificial Intelligence	3	2	2		CSE 123
CSE 361	Operating Systems	4	2	4		CSE 123

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Year 4 - Semester 2						
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Course Code	Course Name	Credits	Hours		Requisites		
			Lect.	Ex./Lab	Co	Pre	
CSE 332	Computer Networks	3	2	2	2	CSE 123	
CSE 322	Compilers	3	2	2	2	CSE 123, CSE 231	
CSE 321	[A] Software Engineering	3	2	2	2	CSE 122	
CSE 352	[A] Machine Learning and Pattern Recognition	3	2	2	2	PHM 111, CSE 351	
CSE 362	Introduction to Computer Security	3	2	2	2	CSE 123	
CSE 371	Database Systems	3	2	2	2	CSE 123	

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Year 5 - Semester 1							
Course Code	Course Name	Credits	Hours		Requisites		
			Lect.	Ex./Lab	Co	Pre	
HUM 311	Engineering Economics	3	2	2	2		
CSE 281	Professional Communications & Diversity	1	1	1	1		
CSE 353	[A] Computer Vision	3	2	2	2	PHM 111, CSE 351	
CSE 442	[A] Embedded Systems	3	2	2	2	CSE 021, CSE 231	
	Advanced General Education I	3	2	2	2		
ECE 491	Senior Design Project I	2	1	2	2	Passing 120 credit hours	

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Year 5 - Semester 2							
Course Code	Course Name	Credits	Hours		Requisites		
			Lect.	Ex./Lab	Co	Pre	
HUM 312	Ethics for Technology, Engineering and Design	3	2	2	2		
CSE 381	Professional Communication Capstone	1	1	1	1		
CSE 461	[A] Mobile Computing	3	2	2	2	CSE 361	
ECE 421	[A] Communication Systems	3	2	2	2	ECE 231	
	Advanced General Education II	3	2	2	2		
ECE 492	Senior Design Project II	2	1	2	2		

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