Master of Science in Computer and Information Science
Degree Requirements
Course (Credits)

CORE (30 credits + 1 credit EVN course)	DS Concentration (12 credits) | CS Concentration (12 credits)		Free Electives (6 credits)
all are required	choose 4 courses from either concentration		choose any 2 courses (or from concentration courses)
CS310 Theory of Computing CS312 OOAD (or CS323 Advanced OOP) CS312 Advanced Topics in Algorithms CS322 Software Engineering CS326 Database Systems CS340 Machine Learning CS350 Software Project Management DS330 Deep Learning** CS395 Capstone Preparation *(2nd year standing)* CS396 Capstone Thesis (or CS390 Capstone Practicum) *(2nd year standing)* ENV***- 1 credit env. requirement	CS319 Computer Vision CS355 Entrepreneurship CS371 Image Processing Quantum Computing		CS392 Special Topics in Computer Science: System Design CS392 Special Topics in Computer Science: Cloud Computing CS392 Special Topics in Computer Science: Distributed Algorithms IESM324 Applied Statistics for Engineers IESM313 Data Mining & Predictive Analytics IESM311Quality Assurance & Management IESM372 Portfolio Theory IESM360 CAD IESM361 CAM IESM345 Supply Chain Management IESM347 Design and Innovation of Information Services IESM315 Engineering Economics
	CS342 Data Science CS343 Data Visualization CS345 Bioinformatics CS346 Artificial Intelligence CS362 Time Series Analysis	CS315 Cryptography CS317 Computer Graphics CS331 Operating Systems CS336 Compiler Design CS337 Cybersecurity	

	Bayesian Statistics	CS314 Theory of Communication Networks CS333 Network Programming	

PREPARATORY COURSES
IESM106 Probability & Statistics CS111 Discrete Mathematics CS120 Introduction to OOP CS121 Data Structures CS130 Computer Organization CS211 Introduction to Algorithms

* All courses are 3 credits unless otherwise noted