

## 2 Year Plan for Associate of Science in Engineering Science (Mechanical Engineering Specialization)

Year 1 - Fall Semester			Year 1 - Spring Semester		
Course	Credits	Pre/co-requisites	Course	Credits	Pre/co-requisites
ENS 100 Introduction to Engineering Science	2	CUNY Test (Read, Write Mth)	PHY 160 General Physics II (FSWR)	3	MTH 232, PHY 120, PHY 121, PHY 161
PHY 120 General Physics I	3	MTH 230 or 231, PHY 121	PHY 161 General Physics II Laboratory (FSWR)	1	PHY 160, PHY 120
PHY 121 General Physics I Laboratory (RLPR)	1	MTH 230 or 231, PHY 120	Flexible Core - FUSR	3	(It varies)
MTH 231 Analytical Geometry and Calculus I (RMQR)	3	MTH 123 (A) or MTH 130, MTH 229	ENS 220 Introduction to Computer Engineering	4	ENS 136
ENS 136 Computer-aided Engineering I	2	ENS 100, MTH 123 or higher	ENG 151 College Writing (RECR)	3	ENG 111
ENG 111 Introduction to College Writing (RECR)	3	CUNY Test (Read, Write)	MTH 232 Analytical Geometry and Calculus II (STEM)	3	MTH 230 or 231, MTH 229
MTH 229 Calculus Computer Laboratory	1	MTH 231			
TOTAL	15 credits		TOTAL	17 credits	
Year 2 - Fall Semester			Year 2 - Spring Semester		
Course	Credits	Pre/co-requisites	Course	Credits	Pre/co-requisites
Any additional course from the 5 Flexible Common Core Areas (FWGR, FUSR, FCER, FISR, or FSWR)	3	(It varies)	Choice 4 credits (CHM or ECO or ENS 362)	4	(It varies)
ENS 310 Thermodynamics	4	PHY 160 or PHY 230	ENS 110 Engineering Graphics	2	CUNY Test (Read, Write Mth)
Flexible Core - FWGR	3	(It varies)	Flexible Core - FCER	3	(It varies)
Flexible Core - FISR	3	(It varies)	CSC 270 Introduction to Scientific Computing	4	MTH 230 or MTH 231
ENS 221 Digital Electronics Laboratory	2	ENS 220			
TOTAL	15 credits		TOTAL	13 credits	

NOTE – This is the ideal course of study. Students who do not test into MTH 123 or higher will need to focus on math classes and general education requirements until they have met the necessary prerequisites. See advisor for details.