KEAN UNIVERSITY
COLLEGE OF NATURAL, APPLIED and HEALTH SCIENCES
(78202) B.A. MATHEMATICAL SCIENCES (Data Analytics Option) 120 S.H.
EFFECTIVE DATE: Fall 2016 **START TERM: _____**

NAME			
STUDENT ID#			
GENERAL EDUCATION: 47-49 Semester Hours (S.H.)		**ACADEMIC MAJOR: 42 Semester Hours (S.H.)**	
Foundation Requirements[1] 13 S.H		****Foundation Core 18 S.H.**	
GE 1000 Transition to Kean[2] or GE 3000 Transfer Transitions[2]	1	MATH 2415 Calculus I	4
**ENG 1030 Composition	3	MATH 2416 Calculus II	4
MATH 1054 Precalculus[3,4]	3	MATH 2995 Matrix and Linear Algebra	3
COMM 1402 Speech Communication	3	MATH 3415 Calculus III	4
GE 2024 Research & Technology	3	MATH 3544 Probability and Math Statistics	3
Disciplinary & Interdisciplinary Distribution Requirements		****Concentration 15 S.H.**	
		MATH 2526 Applied Statistics	3
***Humanities* 9 S.H.**		MATH 3700 Big Data Computing	3
*ENG 2403 World Literature	3	MATH 3710 Foundations of Data Analysis	3
(Select two courses from different areas)		MATH 4710 Big Data Visualization	3
Fine Arts or Art History	3	MATH 4720 Statistical Data Mining	3
Philosophy or Religion	3		
Foreign languages (Must take I and II for credit)	3		
Music or Theatre	3		
Interdisciplinary	3		
		Major Electives 9 S.H.	
***Social Sciences* 9 S.H.**		(With advisement, from 3000 – 4000 level MATH courses)	
* HIST 1062 Worlds of History	3	**Suggested courses**	
(Select two courses from different areas)		MATH 3760 Big Data Statistical Analysis I	
Psychology	3	MATH 3780 Big Data Techniques	
Economics or Geography	3	MATH 3560 Regression Analysis	
Political Science	3		
Sociology or Anthropology	3	**FREE ELECTIVES: 25-27 S.H.**	
Interdisciplinary	3	Additional courses in Computer Science[5], Physics, or other Sciences, Technology, Economics, or Management recommended[5]. No Mathematics courses allowed other than MATH 1000 50% of free electives must be taken at the 3000-4000 level.	
***Science and Mathematics* 11-12 S.H.**			
CPS 1231 Fund of Comp Science[1]	4		
PHYS 2091 or PHYS 2095 or CHEM 1083	4		
Additional GE Science Course: BIO, ES, ENV, CHEM, or PHYS	3-4		
***Health & Physical Education* 2 or 3 S.H.**			
ID 1225 Issues in Contemporary Health **or**			
ID 1010 Leisure & Recreation in Multicultural Society	3		
OR		**Special Notes:**	
Physical Education	1	[1] See prerequisites and equivalencies.	
Physical Education	1	[2] University Requirement for Graduation for all undergraduate students that must be satisfied in one of two ways: Complete GE 1000 (all freshmen and transfers entering with 0-29 credits) OR complete GE 3000 (transfers entering with 30 credits or more)	
		[3] Students who do not qualify on the placement test to take MATH 1054 must take MATH 1000 first.	
/*G.E. and Major Capstone* 3 S.H.**		[4]Students whose qualifying score on the placement test makes them eligible to take Math 2415 may take that course instead. In that case the student must take another 3 credits in free electives to total 120 S.H.	
MATH 4890 Senior Seminar in Mathematics (WE)	3		
		[5] Students will be recommended to complete a minimum of 6 credits at 3000-4000 in Computer Science, Biology, Environmental Sciences, Finance, Economics or Accounting.	
ADDITIONAL REQUIRED COURSES: 4 S.H.		*G.E. required course	
CPS 2231 Computer Org and Programming	4	**Eng 1030 and **all major courses require a grade of C or better.**	
		TOTAL CREDITS:	