



**Associate of Science
Mathematics
to
Bachelor of Arts
Mathematics**

**HCCC
AS - Mathematics**

**NJCU
BA - Mathematics**

Course Number	Course Name	Credits		Course Number	Course Name	Credits
CSS100	College Student Success	1	=	INTD101	Orientation to College	1
ENG101	College Composition I	3	=	ENGL101	English Composition I	3
ENG102	College Composition II	3	=	ENGL102	English Composition II	3
CHP111	College Chemistry I	4	=	CHEM105+1105	General Chemistry I + Lab	4
PHY111	Engineering Physics I	4	=	PHYS140+1140	Principles of Physics I - Lecture + Lab	4
CSC100	Intro to Computers and Computing	3	=	CS107	Computers & Information Systems	3
ENG112	Speech	3	=	ENGL147	Effective Speaking	3
MAT111	Calculus I	4	=	MATH192	Calculus and Analytic Geometry I	4
MAT112	Calculus II	4	=	MATH193	Calculus and Analytic Geometry II	4
MAT211	Calculus III	4	=	MATH292	Calculus & Analytical Geometry III	4
MAT212	Differential Equations	4	=	MATH311	Differential Equations for Engineers	4
MAT215	Linear Algebra	3	=	MATH260	Linear Algebra	3
PHY211	Engineering Physics II	4	=	PHYS141+1141	Principles of Physics II - Lecture + Lab	4
PHY212	Engineering Physics III	4	=	PHYS230	Physics III	4
1 Diversity Elective	TBD	3	=	TBD		3
1 Social Science Elective	TBD	3	=	TBD		3
1 Humanities Elective	TBD	3	=	TBD		3
1 Soc. Sci. or Humanities	TBD	3	=	TBD		3

Total Credits 60

General Education Waiver Awarded

Remaining NJCU Courses

COURSE NUMBER	COURSE NAME	CREDITS
Requirements for Major:		9
MATH 295	Survey of Modern Mathematics	3
MATH 330	Mathematical Statistics I	3
MATH 370	Abstract Algebra	3
Elective courses (9 Credits must be selected from Math at 300 or higher)		9
MATH307	Finite Mathematics	3
MATH320	Modern Geometry I	3
MATH321	Modern Geometry II	3
MATH331	Mathematical Statistics II	3
MATH350	Elements of Numerical Analysis	3
MATH380	Real Analysis	3
MATH385	Reading in Mathematics	3
MATH407	Teaching Mathematics in Secondary Schools	3
MATH410	History of Mathematics	3
MATH430	Topology	3
MATH440	Number Theory	3
MATH445	Complex Variables	3
MATH450	Advanced Calculus I	3
MATH451	Advanced Calculus II	3
MATH482	Mathematics in Junior High School	3
MATH501	Mathematics Content PRAXIS Review	1
MATH503	Computers in Mathematics	3
MATH508	Professionalized Subject Matter in Arithmetic	3
MATH510	Professionalized Subject Matter in Algebra	3
MATH511	Professionalized Subject Matter in Middle School Mathematics	3
MATH512	Professionalized Subject Matter in Geometry	3
MATH514	Professionalized Subject Matter in Pre-Calculus Mathematics	3
MATH515	Math Manipulatives I	3
MATH516	Mathematics Manipulative II	3
MATH517	Calculators in the K-8 Classroom	3
MATH518	Calculators in the Secondary Classroom	3
MATH526	Algorithmic Number Theory	3
MATH531	Numerical Analysis	3
MATH536	Mathematical Modeling	3
MATH540	Graph Theory	3
MATH598	Mathematical Principles of Computer Graphics	3
Free Elective Courses		42