BS Mathematics - Scientific Computing Concentration

(Starting with Precalculus and graduating in an odd year)

✓ **Fall Semester - Year 1**

Course	Title	Cr-hr
MATH 1113	**Precalculus**	4
ENGL 1101	English Composition I	3
CHEM 1211/L	Principles of Chemistry I and Lab	4
POLS 1101	American Government	3
GLOB 1001	Global Issues	1
	Total	**15**

Milestones
Complete Area A2 math
Finish first semester!

✓ **Spring Semester - Year 1**

Course	Title	Cr-hr
MATH 1121	**Calculus I**	4
ENGL 1102	English Composition II	3
CHEM 1212/L	Principles of Chemistry II and Lab	4
MATH 1401	**Elementary Statistics**	3
HIST211X	U.S. History I or U.S. History II	3
	Total	**17**

Milestones
Earn the STEM First Year Certificate
Achieve sophomore status (30 or more credit hours)

✓ **Fall Semester - Year 2**

Course	Title	Cr-hr
MATH 1122	**Calculus II**	4
MATH 2124	**Linear Algebra**	3
PHYS 2211/L	Principles of Physics I and Lab	4
CSCI 1371	**Computing for Scientists and Engineers**	3
ENGL21XX	Literature	3
	Total	**17**

Milestones

✓ **Spring Semester - Year 2**

Course	Title	Cr-hr
MATH 2123	**Calculus III**	4
MATH 2403	**Differential Equations**	4
MATH 3000	**Logic and Proof**	**3**
PHYS 2212/L	Principles of Physics II and Lab	4
PE/WELL	Wellness Requirement	2
	Total	**17**

Milestones
Complete first upper level math course
Achieve junior status (60 or more credit hours)

✓ **Fall Semester - Year 3**

Course	Title	Cr-hr
MATH 3250	**Discrete Mathematics**	3
MATH 3110	**Abstract Algebra I**	3
MATH/CSCI XXXX	**Directed Elective (e.g. Numerical Analysis, Programming in C#)**	3
Area C	Humanities/Fine Arts (Elective)	3
Area E	Social Science (Elective)	3
	Total	**15**

Milestones
Complete all Area C requirements
Apply for graduation (of associate degree)

✓ **Spring Semester - Year 3**

Course	Title	Cr-hr
MATH 4450	**Number Theory**	3
MATH/CSCI XXXX	**Directed Elective (e.g. MATLAB/ C# Seminar, Introduction to R)**	3
Elective	**Elective (e.g. Modern Geometry, Abstract Algebra II)**	3
Area B	Institutional Elective	3
Area E	Social Science (Elective)	3
	Total	**15**

Milestones
Earn an Associate of Science degree!
Achieve senior status (90 or more credit hours)

✓ **Fall Semester - Year 4**

Course	Title	Cr-hr
MATH 4011	**Real Analysis I**	3
MATH/CSCI XXXX	**Directed Electives (e.g. Operations Research, Database Management Systems)**	3
Elective	**Electives (e.g. Critical Thinking, History of Math, Topology, Topics in Math, Topics in Computer Programming)**	3
Elective		3
Elective		3
	Total	**15**

Milestones
Apply for graduation (of bachelor degree)
Apply for graduate programs

✓ **Spring Semester - Year 4**

Course	Title	Cr-hr
MATH 4060	**Complex Variables**	3
MATH/CSCI XXXX	**Directed Electives (e.g. Real Mathematical Modeling , Prob & Stats II, Data Visualization)**	3
MATH/CSCI XXXX		3
MATH 4200	**Undergraduate Seminar in Math**	2
Elective	**Elective (e.g. Physical Geology)**	4
	Total	**15**

Milestones
Complete all degree requirements
Earn a Bachelor of Science degree!

TRACK TOTAL   126