

**Degree: B.A. in Mathematics**  
**Freshman 4-Year Academic Roadmap**

Year 1: Freshman Year				Year Total		28 to 30	
Fall	Term(s)	Pre-req Course(s)	Units	Spring	Term(s)	Pre-req Course(s)	Units
MATH 2210 (GE B4)	Fall & Spring	Math 1401, 1403, or satisfactory score on department placement exam	4	MATH 2220	Fall & Spring	C-or better in MATH 2210	4
CSE 1100 (GE A3), 1250, or 2010*	Fall & Spring		3 or 4	MATH 2310	Fall & Spring	C-or better in MATH 2210 and MATH 2220 as a pre- or co-requisite	4
GE (E)	Fall & Spring		3	GE (A1)	Fall & Spring		3
GE (B1 or B2 with B3)	Fall & Spring		4 or 5	GE (A2)	Fall & Spring		3
<b>Semester Total</b>			<b>14 to 16</b>	<b>Semester Total</b>			<b>14</b>

Year 2: Sophomore Year				Year Total		29	
Fall	Term(s)	Pre-req Course(s)	Units	Spring	Term(s)	Pre-req Course(s)	Units
MATH 2320	Fall & Spring	C-or better in MATH 2220 and 2310	4	MATH 2270	Fall & Spring	MATH 2310	3
MATH 3100 (WI)	Fall & Spring	C- or better in MATH 2220	4	MATH 3329	Fall & Spring	MATH 2310 as a pre-req. or co-req. and MATH 3100	3
GE (C1)	Fall & Spring		3	GE (B1 or B2 w/o lab)	Fall & Spring		3
GE (C2)	Fall & Spring		3	GE (C2)	Fall & Spring		3
<b>Semester Total</b>			<b>14</b>	GE (D1)	Fall & Spring		3
<b>Semester Total</b>			<b>14</b>	<b>Semester Total</b>			<b>15</b>

Year 3: Junior Year				Year Total		32	
Fall	Term(s)	Pre-req Course(s)	Units	Spring	Term(s)	Pre-req Course(s)	Units
MATH 4600	Fall & Spring	MATH 2320 and MATH 3100	4	MATH 4300	Fall & Spring	MATH 2320 and MATH 3100	4
MATH Elective	Fall & Spring		3	MATH Elective	Fall & Spring		3
GE (D2)	Fall & Spring		3	GE (C2)	Fall & Spring		3
Free Electives	Fall & Spring		6	Free Electives	Fall & Spring		6
<b>Semester Total</b>			<b>16</b>	<b>Semester Total</b>			<b>16</b>

Year 4: Senior Year				Year Total		30	
Fall	Term(s)	Pre-req Course(s)	Units	Spring	Term(s)	Pre-req Course(s)	Units
MATH Elective	Fall & Spring		3	MATH Elective	Fall & Spring		3
MATH Elective	Fall & Spring		3	GE (D4)	Fall & Spring		3
GE (D3)	Fall & Spring		3	GE (B5)	Fall & Spring		3
Free Elective	Fall & Spring		6	Free Electives	Fall & Spring		6
<b>Semester Total</b>			<b>15</b>	<b>Semester Total</b>			<b>15</b>
<b>Degree Units Total</b>						<b>120</b>	

\*Course may be offered in summer

\*Note: If a student takes CSE 1250 or CSE 2100 to satisfy the computer science requirement of the degree, then the student will still need to take a GE A3 course.

\*\*Note: Depending on course choices, the student may need to take another free elective course to total 120 units for graduation.

**Degree: B.A. in Mathematics**  
**Transfer 2-Year Academic Roadmap**

Year 3: Junior Year				Year Total		30	
Fall	Term(s)	Pre-req Course(s)	Units	Spring	Term(s)	Pre-req Course(s)	Units
MATH 3100 (WI)	Fall & Spring	C- or better in MATH 2220	4	MATH 3329	Fall & Spring	MATH 2310 as pre-req. or co-req. and MATH 3100	3
MATH 2270	Fall & Spring	MATH 2310	3	MATH 4600	Fall & Spring	MATH 2320 and MATH 3100	4
CSE 1100, 1250, or 2010	Fall & Spring		3 or 4	GE (B5)	Fall & Spring		3
GE (C1 or C2 upper division)	Fall & Spring		3	GE (D4)	Fall & Spring		3
Free Elective	Fall & Spring		1 or 2	Free Elective	Fall & Spring		2
<b>Semester Total</b>			<b>15</b>	<b>Semester Total</b>			<b>15</b>

Year 4: Senior Year				Year Total		30	
Fall	Term(s)	Pre-req Course(s)	Units	Spring	Term(s)	Pre-req Course(s)	Units
MATH 4300	Fall & Spring	MATH 2320 and MATH 3100	4	MATH Elective	Fall & Spring		3
MATH Elective	Fall & Spring		3	MATH Elective	Fall & Spring		3
MATH Elective	Fall & Spring		3	MATH Elective	Fall & Spring		3
Free Elective	Fall & Spring		5	Free Electives	Fall & Spring		6
<b>Semester Total</b>			<b>15</b>	<b>Semester Total</b>			<b>15</b>
<b>*Course may be offered in summer</b>				<b>Degree Units Total</b>		<b>60</b>	

**Degree: B.S. in Mathematics-General Mathematics Concentration**  
**Freshman 4-Year Academic Roadmap**

Year 1: Freshman Year				Year Total			29 to 30
Fall	Term(s)	Pre-req Course(s)	Units	Spring	Term(s)	Pre-req Course(s)	Units
MATH 2210 (GE B4)	Fall & Spring	Math 1401, 1403, or satisfactory score on department placement exam	4	MATH 2220	Fall & Spring	C-or better in MATH 2210	4
CSE 1100 (GE A3), 1250, or 2010*	Fall & Spring		3 or 4	MATH 2310	Fall & Spring	C-or better in MATH 2210 and MATH 2220 as a pre- or co-requisite	4
2000-level science (B1 or B2 with B3; or D3)	Fall & Spring		3 to 5	GE (A1)	Fall & Spring		3
GE (E)	Fall & Spring		3	GE (A2)	Fall & Spring		3
				Free Elective	Fall & Spring		1
<b>Semester Total</b>			14 to 15	<b>Semester Total</b>			15

Year 2: Sophomore Year				Year Total			30 to 31
Fall	Term(s)	Pre-req Course(s)	Units	Spring	Term(s)	Pre-req Course(s)	Units
MATH 2320	Fall & Spring	C-or better in MATH 2220 and 2310	4	MATH 2265	Fall & Spring	MATH 2210 as a pre- or co-requisite	3
MATH 3100 (WI)	Fall & Spring	C-or better in MATH 2220	4	MATH 2270	Fall & Spring	MATH 2310	3
GE (B1 or B2 w/o lab)	Fall & Spring		3	MATH 3329	Fall & Spring	MATH 3100 and MATH 2310 as pre-req or co-req	3
GE (C1)	Fall & Spring		3	GE (B1 or B2 with B3; or D3)	Fall & Spring		3 to 4
Free Elective			1	GE (C2)	Fall & Spring		3
<b>Semester Total</b>			15	<b>Semester Total</b>			15 to 16

Year 3: Junior Year				Year Total			30
Fall	Term(s)	Pre-req Course(s)	Units	Spring	Term(s)	Pre-req Course(s)	Units
MATH 4600	Fall & Spring	MATH 2320 and MATH 3100	4	MATH 5600	Spring	C- or better in MATH 4600	3
MATH Elective	Fall & Spring		3	MATH Elective	Fall & Spring		3
MATH Elective	Fall & Spring		3	GE (C2)	Fall & Spring		3
GE (C2)	Fall & Spring		3	GE (D1)	Fall & Spring		3
Free Elective	Fall & Spring		2	Free Elective	Fall & Spring		3
<b>Semester Total</b>			15	<b>Semester Total</b>			15

Year 4: Senior Year				Year Total			30
Fall	Term(s)	Pre-req Course(s)	Units	Spring	Term(s)	Pre-req Course(s)	Units
MATH 4300	Fall & Spring	MATH 2320 and MATH 3100	4	MATH 5300	Spring	C- or better in MATH 4300	4
MATH Elective	Fall & Spring		3	MATH Elective	Fall & Spring		3
GE (D2)	Fall & Spring		3	GE (B5)	Fall & Spring		3
GE (D4)	Fall & Spring		3	Free Electives	Fall & Spring		5
Free Elective	Fall & Spring		2				
<b>Semester Total</b>			15	<b>Semester Total</b>			15

<b>Degree Units Total</b>						120
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\*Course may be offered in summer

\*Note: If a student takes CSE 1250 or CSE 2100 to satisfy the computer science requirement of the degree, then the student will still need to take a GE A3 course.

**Degree: B.S. in Mathematics - General Mathematics Concentration  
Transfer 2-Year Academic Roadmap**

Year 3: Junior Year					Year Total		30		
Fall	Term(s)	Pre-req	Pre-req Course(s)	Units	Spring	Term(s)	Pre-req	Pre-req Course(s)	Units
MATH 2265	Fall & Spring		MATH 2210 as pre-req or co-req	3	MATH 3329	Fall & Spring		MATH 2310 as pre-req. or co-req. and MATH 3100	3
MATH 3100 (WI)	Fall & Spring		C- or better in MATH 2220	4	MATH 4600	Fall & Spring		MATH 2320 and MATH 3100	4
MATH Elective	Fall & Spring			3	MATH Elective	Fall & Spring			3
CSE 1100, 1250, or 2010	Fall & Spring			3 to 4	GE (C1 or C2 upper division)	Fall & Spring			3
Free elective	Fall & Spring			1 to 2	Free elective	Fall & Spring			2
<b>Semester Total</b>				15	<b>Semester Total</b>				15

Year 4: Senior Year					Year Total		30		
Fall	Term(s)	Pre-req	Pre-req Course(s)	Units	Spring	Term(s)	Pre-req	Pre-req Course(s)	Units
MATH 4300	Fall & Spring		MATH 2320 and MATH 3100	4	MATH 5300	Fall & Spring		C- or better in MATH 4300	3
MATH 5600	Fall & Spring		C- or better in Math 4600	3	MATH Elective	Fall & Spring			3
MATH Elective	Fall & Spring			3	MATH Elective	Fall & Spring			3
GE (B5)	Fall & Spring			3	GE (D4)	Fall & Spring			3
Free elective	Fall & Spring			2	Free elective	Fall & Spring			3
<b>Semester Total</b>				15	<b>Semester Total</b>				15

\*Course may be offered in summer

**Degree Units Total** 60

**Degree: B.S. in Mathematics-Applied Mathematics Concentration  
Freshman 4-Year Academic Roadmap**

Year 1: Freshman Year				Year Total			
Fall	Term(s)	Pre-req Course(s)	Units	Spring	Term(s)	Pre-req Course(s)	Units
MATH 2210 (GE B4)	Fall & Spring	Math 1401, 1403, or satisfactory score on department placement exam	4	MATH 2220	Fall & Spring	C-or better in MATH 2210	4
CSE 1100 (GE A3), 1250, or 2010*	Fall & Spring		3 or 4	MATH 2310	Fall & Spring	C-or better in MATH 2210 and MATH 2220 as a pre- or co-requisite	4
2000 level science course that counts towards math concentration**	Fall & Spring		3 to 5	2000 level science course that counts towards math concentration**	Fall & Spring		3 to 5
GE (E)			3	GE (A1)	Fall & Spring		3
Free Elective			0 to 2	Free Elective	Fall & Spring		0 to 1
<b>Semester Total</b>			<b>15 to 16</b>	<b>Semester Total</b>			<b>15 to 16</b>
Year 2: Sophomore Year				Year Total			
Fall	Term(s)	Pre-req Course(s)	Units	Spring	Term(s)	Pre-req Course(s)	Units
MATH 2320	Fall & Spring	C-or better in MATH 2220 and 2310	4	MATH 2270	Fall & Spring	MATH 2310	3
MATH 3100 (WI)	Fall & Spring	C-or better in MATH 2220	4	MATH 5310	Spring	MATH 2310 and MATH 3100	3
MATH 2265	Fall & Spring	MATH 2210 as pre-req or co-req	3	GE (B1 or B2 with B3; or D3)	Fall & Spring		3 to 5
GE (A2)	Fall & Spring		3	GE (C2)	Fall & Spring		3
				Free Elective	Fall & Spring		1 to 3
<b>Semester Total</b>			<b>14</b>	<b>Semester Total</b>			<b>15</b>
Year 3: Junior Year				Year Total			
Fall	Term(s)	Pre-req Course(s)	Units	Spring	Term(s)	Pre-req Course(s)	Units
MATH 4600	Fall & Spring	MATH 2320 and MATH 3100	4	MATH 4300	Fall & Spring	MATH 2320 and MATH 3100	4
MATH 3329	Fall & Spring	MATH 3100 and MATH 2310 as pre-req or co-req	3	MATH Elective	Fall & Spring		3
GE (C2)	Fall & Spring		3	MATH Elective	Fall & Spring		3
GE (D1)	Fall & Spring		3	GE (C2)	Fall & Spring		3
Free Elective	Fall & Spring		2	GE (C1)	Fall & Spring		3
<b>Semester Total</b>			<b>15</b>	<b>Semester Total</b>			<b>16</b>
Year 4: Senior Year				Year Total			
Fall	Term(s)	Pre-req Course(s)	Units	Spring	Term(s)	Pre-req Course(s)	Units
MATH Elective	Fall & Spring		3	MATH Elective	Fall & Spring		3
MATH Elective	Fall & Spring		3	MATH Elective	Fall & Spring		3
GE (D2)	Fall & Spring		3	GE (B5)	Fall & Spring		3
GE (D4)	Fall & Spring		3	Free Elective	Fall & Spring		4 to 6
Free Elective	Fall & Spring		3				
<b>Semester Total</b>			<b>15</b>	<b>Semester Total</b>			<b>13 to 15</b>
<b>Degree Units Total</b>							<b>120</b>

\*Course may be offered in summer

\*Note: If a student takes CSE 1250 or CSE 2100 to satisfy the computer science requirement of the degree, then the student will still need to take a GE A3 course.

\*\*2000-level science courses may be counted towards GE B1 or B2 with B3; or D3

**Degree: B.S. in Mathematics - Applied Mathematics Concentration  
Transfer 2-Year Academic Roadmap**

Year 3: Junior Year					Year Total		30		
Fall	Term(s)	Pre-req	Pre-req Course(s)	Units	Spring	Term(s)	Pre-req	Pre-req Course(s)	Units
MATH 2265	Fall & Spring		MATH 2210 as pre-req or co-req	3	MATH 3329	Fall & Spring		MATH 2310 as pre-req. or co-req. and MATH 3100	3
MATH 3100 (WI)	Fall & Spring		C- or better in MATH 2220	4	MATH 4600	Fall & Spring		MATH 2320 and MATH 3100	4
MATH Elective	Fall & Spring			3	MATH 5310	Fall & Spring		MATH 2310 and MATH 3100	3
CSE 1100, 1250, or 2010	Fall & Spring			3 to 4	GE (C1 or C2 upper division)	Fall & Spring			3
Free elective	Fall & Spring			1 to 2	Free elective	Fall & Spring			2
<b>Semester Total</b>				15	<b>Semester Total</b>				15

Year 4: Senior Year					Year Total		30		
Fall	Term(s)	Pre-req	Pre-req Course(s)	Units	Spring	Term(s)	Pre-req	Pre-req Course(s)	Units
MATH 4300	Fall & Spring		MATH 2320 and MATH 3100	4	MATH Elective	Fall & Spring			3
MATH Elective	Fall & Spring			3	MATH Elective	Fall & Spring			3
MATH Elective	Fall & Spring			3	MATH Elective	Fall & Spring			3
GE (B5)	Fall & Spring			3	GE (D4)	Fall & Spring			3
Free elective	Fall & Spring			2	Free elective	Fall & Spring			3
<b>Semester Total</b>				15	<b>Semester Total</b>				15
<b>*Course may be offered in summer</b>					<b>Degree Units Total</b>				60

**Degree: B.S. in Mathematics-Teaching Mathematics Concentration  
Freshman 4-Year Academic Roadmap**

Year 1: Freshman Year				Year Total			30
Fall	Term(s)	Pre-req Course(s)	Units	Spring	Term(s)	Pre-req Course(s)	Units
MATH 2210 (GE B4)	Fall & Spring	Math 1401, 1403, or satisfactory score on department placement exam	4	MATH 2220	Fall & Spring	C-or better in MATH 2210	4
MATH 2265	Fall & Spring	MATH 2210 as pre-req or co-req	3	MATH 2310	Fall & Spring	C-or better in MATH 2210 and MATH 2220 as a pre- or co-requisite	4
GE (E)	Fall & Spring		3	GE (A1)	Fall & Spring		3
GE (B1 or B2 with B3)	Fall & Spring		4 to 5	GE (B1 or B2 w/o lab)	Fall & Spring		3 to 4
Free Elective	Fall & Spring		0 to 1	Free Elective	Fall & Spring		1
<b>Semester Total</b>			<b>15</b>	<b>Semester Total</b>			<b>15</b>

Year 2: Sophomore Year				Year Total			30
Fall	Term(s)	Pre-req Course(s)	Units	Spring	Term(s)	Pre-req Course(s)	Units
MATH 2320	Fall & Spring	C-or better in MATH 2220 and 2310	4	MATH 3100	Fall & Spring	C- or better in MATH 2220	4
MATH 2900	Fall & Spring	Equivalent to MATH 1401	4	MATH 3460	Fall & Spring	MATH 2320	3
CSE 1100 (GE A3), 1250, or 2010*	Fall & Spring		3	GE (C1)	Fall & Spring		3
GE (A2)	Fall & Spring		3 to 4	GE (C2)	Fall & Spring		3
Free Elective	Fall & Spring		0 to 1	Free Elective	Fall & Spring		2
<b>Semester Total</b>			<b>15</b>	<b>Semester Total</b>			<b>15</b>

Year 3: Junior Year				Year Total			29
Fall	Term(s)	Pre-req Course(s)	Units	Spring	Term(s)	Pre-req Course(s)	Units
MATH 3329	Fall & Spring	MATH 2310 as pre-req or co-req and MATH 3100	3	MATH 4300	Fall & Spring	MATH 2320 and MATH 3100	4
MATH 3480	Fall & Spring	C- or better in MATH 2220	3	MATH 4900	Fall & Spring	C or better in MATH 2900 and MATH 3329	4
Math Elective	Fall & Spring		3	GE (C2)	Fall & Spring		3
GE (C2)	Fall & Spring		3	GE (D1)	Fall & Spring		3
Free Elective	Fall & Spring		3				
<b>Semester Total</b>			<b>15</b>	<b>Semester Total</b>			<b>14</b>

Year 4: Senior Year				Year Total			31
Fall	Term(s)	Pre-req Course(s)	Units	Spring	Term(s)	Pre-req Course(s)	Units
MATH 3345	Fall & Spring	MATH 3100	3	MATH 5900	Fall & Spring	Senior status, MATH 4900, and C or better in MATH 4300 and MATH 4600	3
MATH 4600	Fall & Spring	MATH 2329 and MATH 3100	4	MATH Elective	Fall & Spring		3
GE (D2)	Fall & Spring		3	GE (D3)	Fall & Spring		3
GE (D4)	Fall & Spring		3	GE (B5)	Fall & Spring		3
Free Elective	Fall & Spring		3	Free Elective	Fall & Spring		3
<b>Semester Total</b>			<b>16</b>	<b>Semester Total</b>			<b>15</b>

*Course may be offered in summer	<b>Degree Units Total</b>	<b>120</b>
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\*Note: If a student takes CSE 1250 or CSE 2100 to satisfy the computer science requirement of the degree, then the student will still need to take a GE A3 course.

**Degree: B.S. in Mathematics - Teaching Mathematics Concentration**  
**Transfer 2-Year Academic Roadmap**

<b>Year 3: Junior Year</b>				<b>Year Total</b>				<b>29 to 30</b>
<b>Fall</b>	<b>Term(s)</b>	<b>Pre-req Course(s)</b>	<b>Units</b>	<b>Spring</b>	<b>Term(s)</b>	<b>Pre-req Course(s)</b>	<b>Units</b>	
MATH 2265	Fall & Spring	MATH 2210 as pre-req or co-req	3	MATH 3329	Fall & Spring	MATH 2310 as pre-req. or co-req. and MATH 3100	3	
MATH 2900	Fall & Spring	Equivalent to MATH 1401	4	MATH 3345	Fall & Spring	MATH 3100	3	
MATH 3100 (WI)	Fall & Spring	C- or better in MATH 2220	4	MATH 3460	Fall & Spring	MATH 2320	3	
CSE 1100, 1250, or 2010	Fall & Spring		3 or 4	GE (C1 or C2 upper division)	Fall & Spring		3	
				GE (D4)	Fall & Spring		3	
<b>Semester Total</b>			<b>14 to 15</b>	<b>Semester Total</b>			<b>15</b>	

  

<b>Year 4: Senior Year</b>				<b>Year Total</b>				<b>30 to 31</b>
<b>Fall</b>	<b>Term(s)</b>	<b>Pre-req Course(s)</b>	<b>Units</b>	<b>Spring</b>	<b>Term(s)</b>	<b>Pre-req Course(s)</b>	<b>Units</b>	
MATH 3480	Fall & Spring	C- or better in MATH 2220	3	MATH 4600	Fall & Spring	MATH 2329 and MATH 3100	4	
MATH 4300	Fall & Spring	MATH 2320 and MATH 3100	4	MATH 5900	Fall & Spring	Senior status, MATH 4900, and C or better in MATH 4300 and MATH 4600	3	
MATH 4900	Fall & Spring	C or better in MATH 2900 and MATH 3329	4	MATH Elective	Fall & Spring		3	
GE (B5)	Fall & Spring		3	MATH Elective	Fall & Spring		3	
Free Electives	Fall & Spring		1 to 2	Free Electives	Fall & Spring		2	
<b>Semester Total</b>			<b>15 to 16</b>	<b>Semester Total</b>			<b>15</b>	
<b>*Course may be offered in summer</b>							<b>Degree Units Total</b>	<b>60</b>