

NAME: \_\_\_\_\_

ID#: \_\_\_\_\_

**IN EFFECT FALL 2016****APPLIED MATHEMATICS: DISCRETE OPTION CURRICULUM (AMTH, DISC)****FRESHMAN YEAR**

ENGL 1100 English Comp I .....	3	ENGL 1120 English Comp II .....	3
<b>MATH 1610 Calculus I</b> .....	<b>4</b>	<b>MATH 1620 Calculus II</b> .....	<b>4</b>
CORE SCIENCE <sup>4</sup> .....	4	CORE SCIENCE <sup>4</sup> .....	4
CORE HISTORY .....	3	CORE HISTORY or LIT <sup>1</sup> .....	3
CORE HUMANITIES .....	3	COMP 1200 Computing for Engr.....	2
	17		16

**SOPHOMORE YEAR**

<b>MATH 2630 Calculus III</b> .....	<b>4</b>	<b>MATH 2650 Linear Diff Eq</b> .....	<b>3</b>
<b>MATH 2660 Linear Algebra</b> .....	<b>3</b>	<b>MATH 3710 Discrete Math</b> .....	<b>3</b>
COMP 2000 Prog HTML, Java.....	3	COMP 3000 Object Oriented Prog.....	3
CORE SOCIAL SCIENCE <sup>2</sup> .....	3	<b>STAT 3600 Prob &amp; Stat</b> .....	<b>3</b>
CORE LITERATURE .....	3	CORE SOC SCI or HUM <sup>3</sup> .....	3
	16		15

**JUNIOR YEAR**

<b>MATH 5750 Graph Theory</b> .....	<b>3</b>	<b>MATH 5330 Computational Alg</b> .....	<b>3</b>
<b>MATH 5310 Algebra I</b> .....	<b>3</b>	<b>Analysis Elective</b> <sup>5</sup> .....	<b>3</b>
CORE SOCIAL SCIENCE <sup>2</sup> .....	3	CORE FINE ARTS .....	3
Interdisciplinary Elective <sup>5</sup> .....	3	Interdisciplinary Elective <sup>5</sup> .....	3
Elective .....	4	Elective .....	4
	16		16

**SENIOR YEAR**

<b>Discrete Math Elective</b> <sup>5</sup> .....	<b>3</b>	<b>Discrete Math Elective</b> <sup>5</sup> .....	<b>3</b>
<b>Discrete Math Elective</b> <sup>5</sup> .....	<b>3</b>	<b>Math Elective</b> <sup>5</sup> .....	<b>3</b>
<b>Algebra/Linear Alg Elective</b> <sup>5</sup> .....	<b>3</b>	<b>Math Elective</b> <sup>5</sup> .....	<b>3</b>
Interdisciplinary Elective <sup>5</sup> .....	3	Elective .....	3
	12		12

**TOTAL HOURS 120**

Long range schedules for COSAM courses are online at [www.auburn.edu/cosam/students/](http://www.auburn.edu/cosam/students/)

Courses in **BOLD** will be used to calculate GPA in major.

Options for courses labeled CORE are in the Auburn University Bulletin ([www.auburn.edu/bulletin](http://www.auburn.edu/bulletin)) under Core Curriculum.

<sup>1</sup> Students must complete a two-course sequence in either HIST or LIT (for example, World History 1 and 2 or American Lit 1 and 2). For complete HIST and LIT sequence options, see the Bulletin.

<sup>2</sup> Students who have AP or transfer credit for US History should talk to an advisor about CORE SOC SCI choices.

<sup>3</sup> If a LIT sequence is chosen, this course must be a CORE SOC SCI. If a HIST sequence is chosen, this course must be a CORE HUMANITIES.

<sup>4</sup> Core Science: One of the sequences PHYS 1600/1610, BIOL 1020 /1030, CHEM 1030/1040 with labs, or GEOL 1100/1110.

<sup>5</sup> Guidelines for Discrete Math electives, Math Electives, Applied Analysis Elective, Algebra/Linear Algebra Elective and Interdisciplinary Electives are on the back of this sheet.

## **APPLIED MATHEMATICS: DISCRETE OPTION CURRICULUM (ADSM, DISC)**

**Discrete Math Electives:** Students may choose from the following courses: MATH 5150, 4900, 5120, 5140, 5180, 5710, 5730, 5770. You may also take STAT 3610.

**Math Elective:** Upper division MATH OR STAT courses. Students may also choose from the list of Discrete Math Electives.

**Applied Analysis Elective:** Students may choose from the following: MATH 5000, 5030, 5160, 5200, 5210, 5300, or 5630.

**Interdisciplinary Electives:** Students should consult with MATH advisors in choosing interdisciplinary electives and must have a plan of study on file in the Dean's Office in order to be cleared for graduation. In general, students may choose from 2000 level courses or above in the schools of Business, Engineering and Science and Mathematics. At least three courses must be taken in the same general area. Also, COSAM courses at the 1000 level that are prerequisites for 2000 level COSAM courses would also generally satisfy the requirement, for example PHYS 1600-1610 and CHEM 1110-1120.

**Algebra/Linear Algebra Electives:** Students may choose from the following courses: MATH 5050, 5320, 5370, and 5640.