BS: Mathematics Major -- Theoretical Concentration

Andrews University 39 semester credits

(updated 1-22-2024)

Acro/Num	Course Title	Credits	Credits	Term	Grade	Quality	Semesters
			Earned	Taken		Points	offered
Required co							
MATH 191	Calculus I	4					
MATH 192	Calculus II	4					
MATH 215	Introduction to Linear Algebra	3					fall
MATH 240	Calculus III	4					fall
MATH 355	Foundations of Advanced Mathematics	3					spring
MATH 389	Mathematics Colloquium (4 sem.)	0					fall and spring
MATH 431	Real Analysis I	3					fall, odd years
Required co	urses: Theoretical Concentration						
MATH 286	Differential Equations	3					spring
MATH 315	Advanced Linear Algebra	3					spring, odd years
MATH 441	Abstract Algebra I	3					fall, even years
	Plus one of the following courses	•					•
MATH 432	Real Analysis II OR	3					spring, even years
MATH 442	Abstract Algebra II	3					spring, odd years
At least 6 cr	edits in additional courses (research	is encou	raged)	•	•		
MATH 405	Applied Mathematics	3					fall, even years
MATH 408	Complex Analysis	3					spring, odd years
MATH 426	Mathematical Modeling	3					fall, odd years
MATH 432	Real Analysis II	3					spring, even years
MATH 442	Abstract Algebra II	3					spring, odd years
MATH 475	Geometry (see note 3)	3					fall, odd years
MATH 487	Special Topics	1-3					
MATH 495	Independent Study	1-3					
MATH 497	Research in Mathematics	0-3					
STAT 340	Probability Theory with Stat. App.	3					spring
STAT 4xx	Mathematical Statistics	3					fall, even years
Cognate		•	-	9	9	-	
CPTR 151	Computer Science I	3					
ENGR 365	Numerical Methods for Engineers	3					fall

Notes:

- 1. Major GPA must be at least 2.25, and no course with a grade below C- may count toward the major.
- 2. For teacher certification, major GPA must be at least 2.50 and no course with a grade lower than a C may count toward the major.
- 3. For secondary teacher certification, students must take MATH 475. Students in an elementary teacher certification program take MATH 221 and MATH 222.
- 4. For teacher certification, the State of Michigan requires that Subject Content Exams must be passed before a recommendation for certification can be made to the State.
- 5. An exit exam must be taken in the senior year.