

MATHEMATICS PROGRAM Checklist

General Education Courses (35 credit hours)	Credit Hours	Sem	Grade
English Composition			
ENGL 110 Composition I	3		
ENGL 111 Composition II	3		
Global Study			
Global Study elective	3		
History			
History Elective	3		
Humanities			
Humanities Elective	3		
Science & Lab			
(AGRI/BIOL/CHEM/PHYS)	4		
English Literature			
Literature Elective	3		
Social Science			
GE Social Science Elective (Must be PSYC 212 for Secondary Education minor)	3		
Wellness and Health			
Wellness/Health Elective	2		
GE Mathematics			
Math 150 GE Math Elective	4		
MATH 260 Calculus I	4		

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Math Core Courses (32 credit hours)	Credit Hours	Sem	Grade
MATH 260 Calculus I	N/A		
MATH 261 Calculus II	4		
MATH 360 Calculus III	4		
MATH 284 Discrete Math	3		
MATH 300 Foundations of Mathematics	3		
MATH 325 Linear Algebra	3		
Math 350 Differential Equations	3		
MATH 400 Adv. Calculus I	3		
MATH 425 Modern Algebra	3		
STAT 330/340 Probability & Statistics I	3		
MATH 495 Mathematics Seminar (or MATH 395 for Secondary Education minor)	3		

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Additional Requirements

Minor Electives*	18
Free (or restricted) Electives**	15
Restricted Electives***	12
Computer Proficiency CSCI 150/151	4
Science & Lab (AGRI/BIOL/CHEM/PHYS)	4

TOTAL = 120 Credit Hours

***Minor Electives (18 credits)**

Students can minor in any degree-granting discipline outside their major. A minor is not required for graduation. If a student who is a Mathematics major does not choose a minor, then those 18 credits can be replaced by any courses in the list of Restricted Electives. The minor is designed for students who are not majoring in mathematics and requires minimum credit hours as set by the academic department in which that discipline is housed. A student must formally declare the minor for it to appear on their official academic transcript. A student must go to the departmental office of their desired minor to receive written communication of the requirements for that discipline. The requirements for a student (i.e., a non-Mathematics major) who desires to minor in Mathematics are the completion of MATH 260, MATH 261, MATH 360, and any two additional mathematics or statistics courses at the 300-level or above. Minor request forms can be obtained online under the link to the Registrar's Office.

Secondary Education Minor (18 credits)

IDST 200 (3 credits), EDUC 201 (2 credits), EDUC 202 (2 credits), EDUC 424 (2 credits), EDUC 315 (3 credits), EDUC 427 (3 credits), SPED 325 or SPED 403 (3 credits). To earn a minor in secondary education, students must satisfy all of the following: (i) be accepted into the VSU Professional Teacher Education Program, (ii) complete the 18 credit hours of the minor and (iii) pass the mandated professional examinations of the Virginia Department of Education. Upon graduation from the Virginia State University mathematics program, all students who satisfy the requirements for successful completion of a minor in secondary education will also receive the Commonwealth of Virginia certification and teaching endorsement in secondary education.

****Free Electives (15 credit hours)**

Math/Stat/Actuarial:

Choose any 15 credit hours from any discipline(s) or from the list of the restricted elective below.

Math Secondary Education:

Conditional: IDST 100 (2 credits) and IDST 101 (2 credits). (These courses do not count toward graduation requirements). They are only taken when SAT scores are less than 1100 or ACT scores are less than 21.

Required: MAED 402 (3 credits), EDUC 401 (3 credits), EDUC 402 (9 credits). (Note: All three of these course are co-requisites and must be taken simultaneously.) These courses may be used as free electives for secondary education minors only.

*****Restricted Electives (12 credit hours)**

MATH 285, MATH 292, MATH 294, MATH 295, Math 299 (for secondary education minor only), MATH 317, MATH 321, MATH 335, MATH 340, MATH 341, MATH 348, MATH 355, MATH 380 (for Actuarial concentration only), MATH 392, MATH 401, MATH 415, MATH 417, MATH 426, MATH 429, MATH 430, MATH 432, MATH 445, MATH 452, MATH 470, MAED 475, MAED 473, MATH 475, MATH 490, MATH 493, STAT 380, STAT 382, STAT 385, STAT 410,

STAT 480, STAT 481, STAT 482, STAT 484, STAT 490, and any 300 or 400 level courses from any of the following: CSCI electives, MANE electives, CPEG electives, ELET electives, ENGR electives.

Required for Secondary Education minor only: MATH 299, MAED 473, MATH 340, MATH 470

Double Major

Students who wish to double major in mathematics will have to complete the following credits hours in which some will be cross listed for both majors:

- All core courses in mathematics (36 credits)
- General Education (GE) requirements (33-37 credits)
- All core courses in the second major (36-42 credits)
- Restricted electives from the above list (minimum of 12 credits).

Recommendations for Advisors of Math Majors

Based upon the history of mathematics majors, approximately 50% of the VSU graduates with a B.S. in Mathematics eventually are offered and accept positions in public school teaching. To enhance their preparation and background for a successful professional career in the teaching of mathematics, the following courses are recommended for all math majors who have not selected a minor:

G.E. Social Science Elective: PSYC 212

Restricted Elective: MATH 340

Restricted Elective: MATH 470

Restricted Elective: MAED 473

Free Elective: EDUC 201

Free Elective: EDUC 202

NOTE: All of the above courses can be used to satisfy graduation requirements based upon the Mathematics Program Checklist that was approved in May 2017