STEM Scholars Program
Placement Testing Information

All Frederick Community College (FCC) students are required to demonstrate that they are ready to be successful in college courses. This can be done by either completing Math and English placement testing through the FCC Testing Center (https://www.frederick.edu/student-resources/testing-center.aspx) or by demonstrating an alternate measure of proficiency that exempts the student from placement testing.

It is important to take these assessments seriously. The STEM Scholars program requires students to demonstrate college readiness in both English and a Math course appropriate to their chosen degree. Students who are unable to meet those placement goals will not be eligible for consideration.

It is recommended that all students take advantage of the Placement Tests Research Guides available at https://guides.frederick.edu/testing under the heading "Study Plans" to ensure the maximum possible score.

English placement testing requires administering Next Generation ACCUPLACER© Reading and Writing assessments.

Math placement testing requires administration of Next Generation ACCUPLACER© Quantitative Reasoning, Algebra and Statistics (QAS)

All tests must be completed by March 1st of the year the student is applying to the STEM Scholars program. Students are allowed to retest once per assessment, no sooner than twenty-four (24) hours after the initial assessment.

For questions about placement testing, please contact:
The FCC Testing Center | 301-846-2522 | testingcenter@frederick.edu
https://www.frederick.edu/student-resources/testing-center.aspx

For placement questions related to the STEM Scholars program, please contact:
The STEM Scholars Committee | questions.stemscholars@frederick.edu

College Readiness in English

Students must take the Next Generation ACCUPLACER© Reading and Writing assessments and earn a score of at least:

Reading: 253

Writing: 263

To be exempt from the English portion of the Next Generation ACCUPLACER© assessments, students would need to have achieved any of the following alternate measures of proficiency:

- Earning a 3 or better on the AP English Language & Comp, English Literature Exam;
- Earning a score of 4 or higher on the IB Language A: Literature SL, Language A: Language & Literature SL, Language A: Literature HL or Language A: Language & Literature HL Test;
- Earning a GED English score of 165 or higher;
- Earning a score of 4 or 5 on the English 10 or English 11 PARCC test;
- Successful Completion of the FCPS English 12 transition Experience
- A composite score/average of 21 on the ACT reading and writing tests
- A score of 480 on the SAT Evidence Based Reading and Writing
- Be a graduate of Maryland Public High Schools and present a transcript that verifies a cumulative, unweighted high school GPA of 3.0 or better

College Readiness in Math

In order to apply for the STEM Scholars program. all applicants must complete either the Next Generation ACCUPLACER© or ALEKS® PPL assessments available at the FCC Testing Center and earn a score that enables them to enter a level of math appropriate to their STEM major, unless they have earned the necessary exemption for their major. Ideally students will have placed into the required math, but students who meet the minimum math requirement may still be considered.

See the table entitled "ALEK PPL and NEXT GENERATION ACCUPLACER MATH PLACEMENT" (Table 2) for placement by Accuplacer Scores for each math course. See the table entitled "2019 Math Exemptions Tables" (Table 3) for a placement by exemption for each math course.

Degree	Required Math	Minimum Math
Biology A.S.	MATH 185: Calculus I	MATH 165: Precalculus
Biotechnology A.A.S.	Any MATH Gen Ed* (MATH 145: College Algebra or MATH 165: Precalculus, recommended)	Any MATH Gen Ed*
Chemistry A.S.	MATH 185: Calculus I	MATH 165: Precalculus
Computer Aided Design A.A.S.	Any MATH Gen Ed*	Any MATH Gen Ed*
Computer Science A.S.	MATH 185: Calculus I	MATH 145: College Algebra
Cybersecurity A.A.S.	Any MATH Gen Ed (MATH 120: Statistics recommended)	Any MATH Gen Ed*
Data Science A.A.S.	Any MATH Gen Ed* (MATH 120: Statistics recommended)	Any MATH Gen Ed*
Engineering A.S.	MATH 185: Calculus I	MATH 165: Precalculus
Game and Simulation Development A.A.S.	Any MATH Gen Ed (MATH 120: Statistics recommended)	Any MATH Gen Ed*
Information Technology Specialist A.A.S.	Any MATH Gen Ed*	Any MATH Gen Ed*
Mathematics A.S.	MATH 185: Calculus I	
Network Engineering A.S.	Any MATH Gen Ed*	Any MATH Gen Ed*
Software Engineering A.S.	Any MATH Gen Ed (MATH 120: Statistics recommended)	Any MATH Gen Ed*
STEM A.S.	MATH 165: Precalculus or MATH 185: Calculus I	MATH 145: College Algebra
STEM Technology A.S.S.	Any MATH Gen Ed (MATH 120: Statistics recommended)	Any MATH Gen Ed*

- MATH Gen Ed courses include:
  - MATH 101: Foundations of Mathematics
  - MATH 110: Fundamental Concepts of Mathematics I
  - MATH 120: Statistics
  - MATH 125: Business Statistics
  - MATH 145: College Algebra
  - MATH 165: Precalculus
  - MATH 175: Applied Calculus
  - MATH 185: Calculus I
  - MATH 195: Calculus II

ALEK PPL and NEXT GENERATION ACCUPLACER MATH PLACEMENT

Table 2

ALEKS	NG QAS	NG AAF	ALEK PPL and NEXT GENERATION ACCUPLACER MATH PLACEMENT		
			Subject	Course	Description
0-13	200-236		MATH	50	Adult Community Education - Math (2)
14-29	237-262		MATH	67*	Educator Preparation in Mathematics (2)*
14-29	237-262		MATH	101A	Foundations of Mathematics & Instruction with Algebra (5)**
30-60	263-300	240-300	MATH	101	Foundations of Mathematics (3)**
14-29	237-262		MATH	67+110	Fundamental Concepts of Mathematics I (2+4)*
30-60	263-300	240-300	MATH	110	Fundamental Concepts of Mathematics I (4)**
14-29	237-262		MATH	67+113	Fundamental Concepts of Mathematics II (2+4)*
30-60	263-300	240-300	MATH	113	Fundamental Concepts of Mathematics II (4)**
14-29	237-262		MATH	120A	Statistics & Instruction with Algebra (5)**
30-60	263-300	240-300	MATH	120	Statistics (3)**
30-60	263-300	240-300	MATH	125	Business Statistics (3)**
30-60	263-300	240-300	MATH	127	Statistics with Probability (4)**
14-29	237-262		MATH	145S	College Algebra with Algebraic Support (6)***
30-60	263-300	240-300	MATH	145	College Algebra (3)***
61-75		261-300	MATH	165	Precalculus (4)***
61-75		261-300	MATH	170	Introduction to Discrete Mathematics (3)***
61-75		261-300	MATH	175	Applied Calculus (3)***
76-100		276-300	MATH	185	Calculus I (4)

(Note: NG QAS is the Next Generation Accuplacer Algebra, Math, Statistics Test and NG AAF is the Next Generation Accuplacer Advanced Algebra and Functions Test.)

2019 MATH EXEMPTIONS TABLES

Table 3

Exemptions to enroll in:

- MATH 101 - Foundations of Mathematics,
- MATH 120 – Statistics,
- MATH 125 – Business Statistics,
- MATH 127 - Statistics with Probability, or
- MATH 145 – College Algebra

FCPS Courses	**Expiration**
FCPS Algebra II or higher (A, B)	1 yr from HS grad
FCPS Advanced Algebra w/Trig (A, B, or C)	1 yr from HS grad
FCPS Intermediate Transitional Algebra	1 yr from HS grad
FCPS Transition Math Modules	1 yr from HS grad
FCPS Statistics & Prob (A, B, or C)	1 yr from HS grad
FCPS Precalculus course (A, B, or C)	1 yr from HS grad
FCPS Precalculus Final Exam (A, B)	1 yr from HS grad
FCPS AP Calculus AB (A, B, or C)	1 yr from HS grad
FCPS AP Calculus BC (A, B, or C)	1 yr from HS grad
FCPS Calculus III (A, B, or C)	1 yr from HS grad
FCPS/MD 3.0 GPA (*out of county students also eligible*)	5 yr from HS grad
Standardized Exams	
Algebra II PARCC (4 or 5)	1 yr from HS grad
Geometry PARCC (4 or 5)	1 yr from HS grad
ACT (21+)	5 yrs from test date
SAT (530+)	5 yrs from test date
AP Statistics (3 or higher credit eligible)	5 yrs from test date
AP Calculus AB (4-5 credit eligible)	5 yrs from test date
AP Calculus AB **(3 exemption from placement testing only)**	5 yrs from test date
AP Calculus BC (4-5 credit eligible)	5 yrs from test date
AP Calculus BC **(3 exemption from placement testing only)**	5 yrs from test date
IB Math (4 or higher)	5 yrs from test date
GED - Mathematical Reasoning (165 or higher)	1 yr from test date

2019 MATH EXEMPTIONS TABLES

Table 3 (cont.)

Exemptions to enroll in: • MATH 165 - Precalculus • MATH 170 – Introduction to Discrete Mathematics • MATH 175 – Applied Calculus	
FCPS Courses	**Expiration**
FCPS Precalculus course (A, B, or C)	1 yr from HS grad
FCPS Precalculus Final Exam (A, B)	1 yr from HS grad
FCPS AP Calculus AB (A, B, or C)	1 yr from HS grad
FCPS AP Calculus BC (A, B, or C)	1 yr from HS grad
FCPS Calculus III (A, B, or C)	1 yr from HS grad
Standardized Exams	
AP Calculus AB (4-5 credit eligible)	5 yrs from test date
AP Calculus AB **(3 exemption from placement testing only)**	5 yrs from test date
AP Calculus BC (4-5 credit eligible)	5 yrs from test date
AP Calculus BC **(3 exemption from placement testing only)**	5 yrs from test date

Exemptions to enroll in: • MATH 185 – Calculus I	
FCPS Courses	**Expiration**
FCPS Precalculus Final Exam (A, B)	1 yr from HS grad
FCPS AP Calculus AB (A, B, or C)	1 yr from HS grad
FCPS AP Calculus BC (A, B, or C)	1 yr from HS grad
FCPS Calculus III (A, B, or C)	1 yr from HS grad
FCPS/MD 3.0 GPA (*out of county students also eligible*)	5 yr from HS grad
Standardized Exams	
AP Calculus AB (4-5 credit eligible)	5 yrs from test date
AP Calculus AB **(3 exemption from placement testing only)**	5 yrs from test date
AP Calculus BC (4-5 credit eligible)	5 yrs from test date
AP Calculus BC **(3 exemption from placement testing only)**	5 yrs from test date