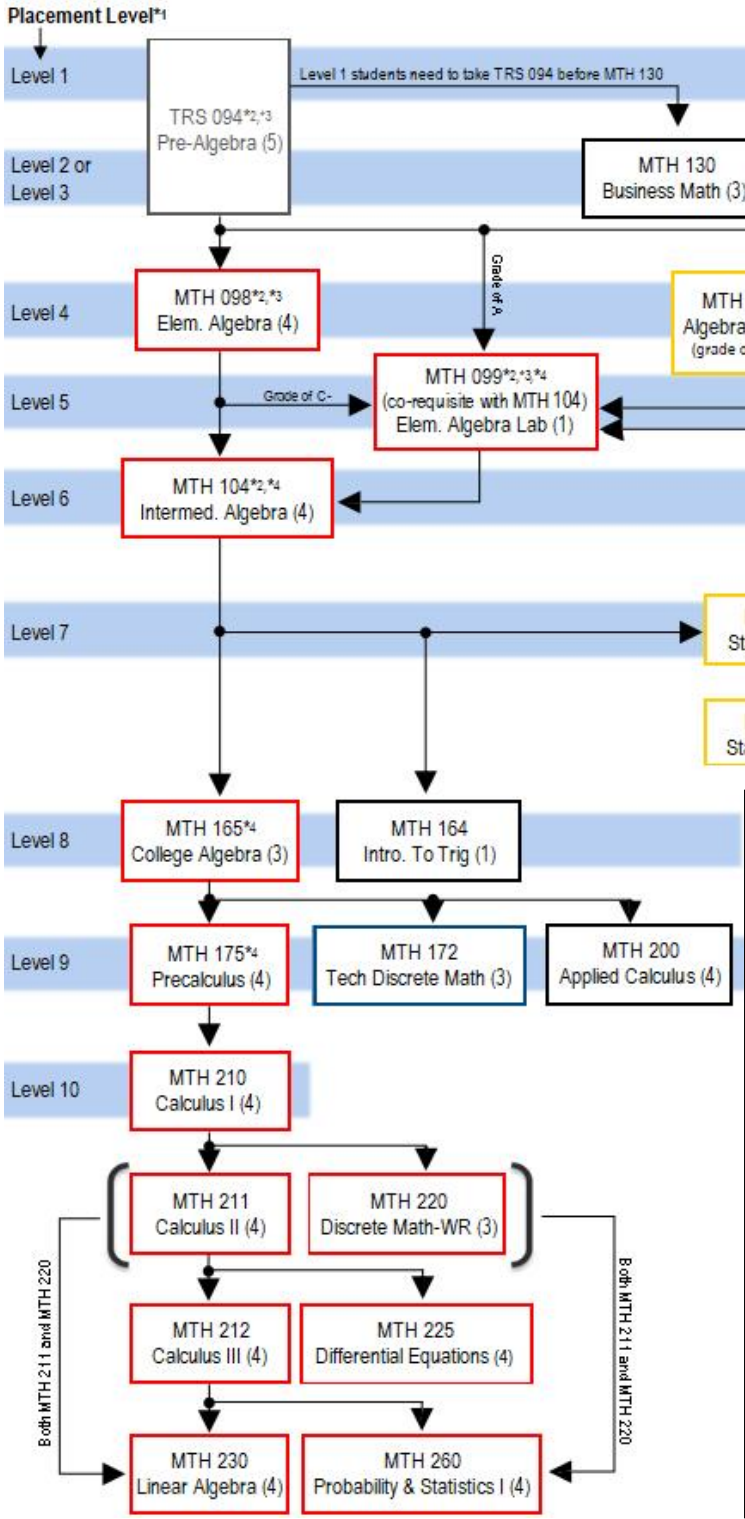
Monroe Community College
STATE UNIVERSITY OF NEW YORK

Mathematics Course Paths
School of Applied Sciences & Technologies
2023–24 Academic Year



Students are encouraged to consult with their advisor regarding the appropriate mathematics course path that corresponds with their placement and program.

Unless otherwise specified, a grade of C or higher is required to progress to the next math course.

- *1 Student may take any course at placement level or lower level.
- *2 Flexible Pace options available.
- *3 Imputed Credit Course. Does not count towards a college degree.
- *4 Available as an accelerated option; refer to the Accelerated Options Table.
- *5 MTH 096 is intended only for students whose terminal math requirement is Statistics.
- *6 This course replaces MTH 135, MTH 140 and MTH 141. Although these courses are no longer offered, they continue to serve as potential prerequisites for other mathematics courses (see the course descriptions on MCC's website.)

Please refer to the following pages for additional notes, references, and text outline of the chart.

Which MCC Math Course Should I Take?
School of Applied Sciences & Technologies

Students in this school have different math goals. Each pathway is described below. Students may start at any course at placement level (or lower) and proceed along the pathway until their math goals are met. *(Note: in each pathway, a grade of C or higher is required to move to the next course unless otherwise stated.)*

To qualify to take MTH 130 Business Math, the following path is recommended:

- TRS 094 Pre-Algebra (Placement Levels 1,2 or 3)
- MTH 130 Business Math (Placement Levels 2 or 3)

To qualify to take MTH 175 Precalculus, MTH 172 Tech Discrete Math or MTH 200 Applied Calculus, the following path is recommended:

- TRS 094 Pre-Algebra (Placement Levels 1,2 or 3)
- MTH 098 Elementary Algebra (Placement Level 4)
- MTH 104 Intermediate Algebra (Placement Level 6) *(Note: Students who initially place at a Level 5 or students who earn a C- in MTH 098 or students who earn an A in MTH 094 may take MTH 099 as a corequisite with MTH 104.)*
- MTH 165 College Algebra (Placement Level 8)
- MTH 175 Precalculus OR MTH 172 Tech Discrete Math OR MTH 200 Applied Calculus (Placement Level 9)

To qualify to take MTH 210, Calculus 1 or higher, the following path is recommended:

- TRS 094 Pre-Algebra (Placement Levels 1,2 or 3)
- MTH 098 Elementary Algebra (Placement Level 4)
- MTH 104 Intermediate Algebra (Placement Level 6) *(Note: Students who initially place at a Level 5 or students who earn a C- in MTH 098 or students who earn an A in MTH 094 may take MTH 099 as a corequisite with MTH 104.)*
- MTH 165 College Algebra (Placement Level 8)
- MTH 175 Precalculus (Placement Level 9)
- MTH 210 Calculus 1 (Placement Level 10)
- Following the successful completion of MTH 210 Calculus I, students may continue with MTH 211 Calculus II and/or MTH 220 Discrete Math.
- Following the successful completion of MTH 211 Calculus II, students may continue with MTH 212 Calculus III and/or MTH 225 Differential Equations.
- Students are qualified to take MTH 230 Linear Algebra with the successful completion of MTH 212 Calculus III or the successful completion of both MTH 211 Calculus II and MTH 220 Discrete Math.
- Students are qualified to take MTH 260 Probability and Statistics with the successful completion of MTH 212 Calculus III or the successful completion of both MTH 211 Calculus II and MTH 220 Discrete Math.

Note: Accelerated options exist for courses MTH 104/MTH 165, and MTH 165/MTH 175.

To qualify to take MTH 160 Statistics I or MTH 161 Statistics II, the following path options are recommended:

Path 1

- TRS 094 Pre-Algebra OR TRS 050 (Placement Level 2 or 3) Support Lab for MTH 150 Survey of Math (must be ENG 101 ready)
- MTH 150 Survey of Math (Placement Level 4)
- MTH 152 Survey of Mathematics for Technicians (Placement Level 6)
- MTH 160 Statistics I (Placement Level 7)
- MTH 161 Statistics II (Placement Level 7)

Path 2

- TRS 094 Pre-Algebra (Placement Levels 1,2 or 3)
- MTH 098 Elementary Algebra (Placement Level 4)
- MTH 104 Intermediate Algebra (Placement Level 6) *(Note: Students who initially place at a Level 5 or students who earn a C- in MTH 098 or students who earn an A in MTH 098 may take MTH 099 as a corequisite with MTH 104.)*
- MTH 160 Statistics I (Placement Level 7)
- MTH 161 Statistics II (Placement Level 7)

Note: As alternative to MTH 098 and MTH 104, students may also qualify for MTH 160 Statistics I via TRS 094 (Placement Level 1) and MTH 096 (Placement Level 4) with a grade of B- or better. MTH 096 is intended only for students whose terminal math requirement is Statistics. Or, students may forgo MTH 096 by taking the MTH 060 Support Lab for Statistics as a corequisite with MTH 160.

Note for all Pathways: TRS 094, MTH 098, MTH 099, and MTH 104 are imputed credit courses and do not count towards a college degree.

Math Requirements for Programs in the School of Applied Sciences & Technologies: 2023-24 Academic Year

Code	Degree	Program	Math Requirements in Program	Math Requirement for Program Entrance
ASC1	Cert	Advanced Studies		550 Math or Verbal SAT
HV01	AAS	Air Cond. Tech.: Heating/Ventilation	*135/up (MCC-QL) (not 150/156)	Elementary Algebra with Geometry (or MTH 098 at MCC)
AT01	AAS	Apprentice Training Automotive: GM ASEP	150/up	MTH 150 ready
AT10	AAS	Apprentice - Auto. Toyota T-TEN	150 or other SUNY-M course if approved by program chair	MCC Level 4 Mathematics placement
AT12	Cert	Apprentice - Auto. Toyota T-TEN	150	MCC Level 4 Mathematics placement
AT13	AAS	Automotive - Multi-Manufacturer	150 or other SUNY-M course if approved by program chair	Elementary Algebra with Geometry (or MTH 098 currently registered in or higher).
AT02	Cert	Automotive Technology	*135/104/(164,165)/175/up	Elementary Algebra with Geometry (or MTH 098 currently registered in or higher). 2 years of high school Regents algebra are recommended

Code	Degree	Program	Math Requirements in Program	Math Requirement for Program Entrance
CS01	AS	Computer Science	210,211,220, (230/ENG 251)	Pre-Calculus in high school with 83 or better, MTH 175 with a C or better or MCC Level 10 Math Placement
CP01	AAS	Computer Systems Technology	165/up (MCCQL), 2 of:160/172/175/210/ 211/220	
CT01	AAS	Construction Technology	*140/(164,165)/175/210/ 211/212/225 (+NS&M)	Intermediate Algebra with Trigonometry (or MTH 104 at MCC)
HM09	Cert	Culinary Arts		TRS 092 with a grade of C or better or MCC Level 2 Mathematics Placement
HM05	AAS	Culinary Arts	130/160/165/up (MCC-QL)	TRS 092 with a grade of C or better or MCC Level 2 Mathematics Placement
ET01	AAS	Elect. Eng. Tech. - Electronics	(150/up),(152/up) (175/up recommended for transfer)	MTH 150 ready
ETX1	Cert	Electronics Technology	(150/up),(152/up) (175/up recommended for transfer)	MTH 150 ready
EM02	Cert	Emergency Medical Services	150/up	Elementary Algebra with Geometry (or MTH 098 at MCC)
FR01	AAS	Fire Protection Technology	150/152/160/up (MCC-QL)	Algebra (1 year high school math or placement into Level 4 Math at MCC)
FR03	AS	Fire Protection Technology	150/160/PHL 102 or any SUNY-M elective	Students should be ready to enter MTH 150
HV02	Cert	Heating, Ventilating, A/C	104/*135/*140/*141/165 /175/up	Elementary Algebra with Geometry (or MTH 098 at MCC)
EM06	AS	Homeland Security	150/up (SUNY-M)	TRS 094 with a grade of C or better, or MCC Level 4 Mathematics Placement
EM04	Cert	Homeland Security		
HM14	Cert	Hospitality		Algebra (1-year high school math) or MCC Level 2 Mathematics placement

Code	Degree	Program	Math Requirements in Program	Math Requirement for Program Entrance
HM01	AAS	Hospitality Management	130/160/165/up (MCC-QL)	Algebra (1-year high school math) or MCC Level 2 Mathematics placement
AI02	Cert	Industrial Automation-Mechatronics	150/up (164/165/up recommended for transfer)	High School Algebra or MTH 150-ready
AI01	AAS	Industrial Automation Technology	(150/up),(152/up) (164/165/up recommended for transfer)	High School Algebra or MCC Level 2 Mathematics Placement
IT01	AS	Information Technology	160,172, (200/SPC 142/ENG LIT)	Intermediate Algebra with Trigonometry (or MTH 104 at MCC)
IN01	AAS	Information & Network Technology	104/152/165/up (MCC-QL)	MTH 098 or MTH 150 ready with a grade of C or better
LE02	Cert	Law Enforcement		
LA04	AS	Lib. Arts & Sci. - Gen. Studies	150/up (SUNY-M) /PHL 102	Algebra (1-year high school math or placement into Level 4 Math at MCC)
LA10	AS	Lib. Arts & Sci. - Gen. Studies - Nutrition	160,165/up	Intermediate Algebra with Trigonometry (or MTH 104 at MCC)
MT02	Cert	Mechanical CADD	(150/up), (152/up), (175/up recommended for transfer)	MTH 150 ready. Recommended high school courses in elementary algebra and geometry
MT01	AAS	Mechanical Technology	(150/up), (152/up) (175/up recommended for transfer)	MTH 150 ready
OF02	AAS	Office Technology: Office Admin. Assistant	130	Algebra (1-year high school math or placement into Level 3 Math at MCC)
OF06	Cert	Medical Office Assistant		
OT01	AAS	Optical Systems Technology	(152/up recommended for workforce and 175/up recommended for transfer)	MTH 150 ready
OT02	Cert	Optical Systems Technology		MTH 150 ready

Code	Degree	Program	Math Requirements in Program	Math Requirement for Program Entrance
EM01	AAS	Paramedic	150/160/165/up (MCC-QL)	
EM05	Cert	Paramedic Certificate		
EM05	Cert	Paramedic Certificate		
PM01	AAS	Precision Machining		Elementary Algebra with Geometry (or MTH 098 at MCC). (It is recommended that students have a minimum of 2 years of high school math or place Level 5 or higher prior to enrolling in this program.)
PM02	Cert	Precision Machining		Elementary Algebra with Geometry (or MTH 098 at MCC). (It is recommended that students have a minimum of 2 years of high school math or place at MTH 104 or higher prior to enrolling in this program.)
PM04	Cert	Prec. Mach.- Optical Fabrication		Algebra (1-year high school math or placement into Level 4 Math at MCC)
PS01	AAS	Public Safety Communications	*135/*140/150/160/up (MCC-QL)	Recommend high school course in math
ST02	Cert	Solar Thermal Technology	*135	Elementary Algebra with Geometry (or MTH 098 at MCC)
HM11	Cert	Travel and Tourism		Mathematics placement at Level 2 or higher

Key:

- A comma means "and". A slash means "or". So 160,165/up means MTH 160 and MTH 165 (or higher).
- SUNY-M means that the course selected must be a SUNY General Education Mathematics course.
- MCC-QL means that the course selected must be an MCC General Education Quantitative Literacy course.

All information subject to change/correction.

See page 1 for a flow chart of math courses for this school.

Mathematics Accelerated Options: 2023-24 Academic Year

The options outlined here allow a student to complete more than one course in a semester. These are good choices for motivated students with strong study skills.

Co-requisite Courses

Courses	Credits and Hours	Prerequisite	Successful Result
TRS 050 with MTH 150	TRS 050: 1 imputed credit MTH 150: 3 credits 5 hours/wk	ENG 101 ready and Math placement level 2 or 3 or TRS 092 C or better	Credit for TRS 050 and Credit for MTH 150
MTH 060 with MTH 160	MTH 060: 1 imputed credit MTH 160: 3 credits 5 hours/wk	English 101 ready and math placement level 4 or TRS 094 C or better	Credit for MTH 060 and Credit for MTH 160
MTH 099 with MTH 104	MTH 099: 1 imputed credit MTH 104: 4 credits 6 hours/wk	Math placement level 5 or TRS 094 A or MTH 098 C- or MTH 096 B- or better	Credit for MTH 099 (equivalent to MTH 098) and Credit for MTH 104
MTH 104 with MTH 165 (FastTrack)	MTH 104: 4 credits MTH 165: 3 credits 7 hours/wk	Math placement level 6 or MTH 098 C or better (same as entry to MTH 104)	Credit for MTH 104 and Credit for MTH 165
MTH 165 with MTH 175 (FastTrack)	MTH 165: 3 credits MTH 175: 4 credits 7 hours/wk	Math placement level 8 or MTH 104 C or better (same as entry to MTH 165)	Credit for MTH 165 and Credit for MTH 175

Flexible Pace

Effective Fall 2023, if a student is at risk for not completing a MTH flex course, they should consult with their instructor as soon as possible.

Accelerating with Flexible Pace TRS 094

TRS 094 students who finish early will be eligible to start either MTH 096 or MTH 098. Students who do not finish this next course will need to retake it in a future semester.

Accelerating with Flexible Pace MTH 096, 098, 099, 104

In a MTH 096, MTH 098, MTH 099, & MTH 104 Flex paced class, a student who completes the class early can start the next Flex pace course. (It is possible to complete two courses in one semester.)

Also, MTH 096 and MTH 098 share 4 modules of content. A student who has taken a flex pace MTH 098 in past semesters can take MTH 096 in the Fall 2023 semester, and the test grades for the 4 common modules are imported into MTH 096 (or vice versa).