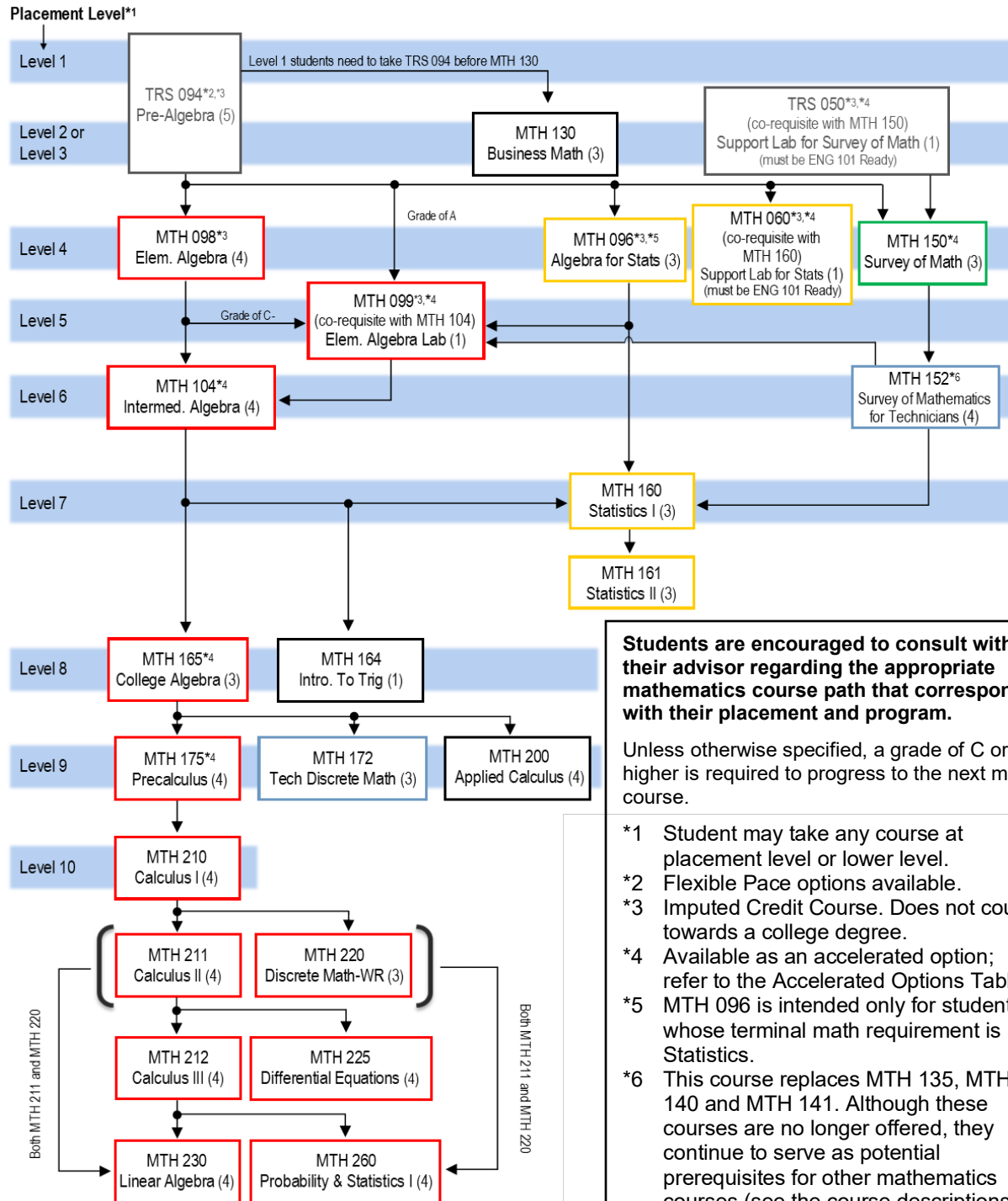




## Mathematics Course Paths School of Applied Sciences & Technologies 2024–25 Academic Year



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 an alternative, students may also qualify for MTH 160 Statistics I via TRS 094 (Placement Level 1) and MTH 096 (Placement Level 4). (MTH 096 is intended only for students whose terminal math requirements is Statistics.) Students may also take MTH 160 with a corequisite of MTH 060 (at Placement Level 4) instead of MTH 096.*

*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 2024-25 Academic Year

Code	Degree	Program	Math Requirements in Program	Math Requirement for Program Entrance
ASC1	Cert	Advanced Studies	None	550 Math or Verbal SAT
HV01	AAS	Air Cond. Tech.: Heating/Ventilation	150/up (SUNY-M)	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	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
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 (MCC-QL), 2 of: 160/172/175/210/211/220	None
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	None	TRS 092 with a grade of C or better or MCC Level 2 Mathematics Placement
HM05	AAS	Culinary Arts	150/160/165/up (SUNY-M)	TRS 092 with a grade of C or better or MCC Level 2 Mathematics Placement

<b>Code</b>	<b>Degree</b>	<b>Program</b>	<b>Math Requirements in Program</b>	<b>Math Requirement for Program Entrance</b>
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 (SUNY-M)	Algebra (1 year high school math or placement into Level 4 Math at MCC)
FR03	AS	Fire Protection Technology	150/152/160 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)
HM14	Cert	Hospitality	None	Algebra (1-year high school math) or MCC Level 2 Mathematics placement
HM01	AAS	Hospitality Management	150/160/165/up (SUNY-M)	Algebra (1 year high school math) or TRS 092 with a grade of C or better, or MCC Level 2 Mathematics Placement
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, 200	Intermediate Algebra with Trigonometry (or MTH 104 at MCC)
IN01	AAS	Network and Security Administration	152 or any 4-credit SUNY-M Math elective	MTH 150 with a grade of C or higher or MCC Level 6 Mathematics placement
LE02	Cert	Law Enforcement	None	None
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)

<b>Code</b>	<b>Degree</b>	<b>Program</b>	<b>Math Requirements in Program</b>	<b>Math Requirement for Program Entrance</b>
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	150	Algebra (1 year high school math or placement into Level 3 Math at MCC)
OF06	Cert	Medical Office Assistant	None	None
OT01	AAS	Optical Systems Technology	None (152/up recommended for workforce and 175/up recommended for transfer)	MTH 150 ready
OT02	Cert	Optical Systems Technology	None	MTH 150 ready
EM01	AAS	Paramedic	150/160/165/up (MCC-QL)	None
EM05	Cert	Paramedic Certificate	None	None
PM01	AAS	Precision Machining	None	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	None	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	None	Algebra (1 year high school math or placement into Level 4 Math at MCC)

Code	Degree	Program	Math Requirements in Program	Math Requirement for Program Entrance
PS01	AAS	Public Safety Communications	*135/*140/150/160/up (MCC-QL)	Recommend high school course in math
AI02	Cert	Robotics and Automation	150/up (164/165/up recommended for transfer)	High School Algebra or MTH 150-ready
ST02	Cert	Solar Thermal Technology	*135	Elementary Algebra with Geometry (or MTH 098 at MCC)
HM11	Cert	Travel and Tourism	None	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: 2024-25 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***

<b>Courses</b>	<b>Credits and Hours</b>	<b>Prerequisite</b>	<b>Successful Result</b>
<b>TRS 050 with MTH 150</b>	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
<b>MTH 060 with MTH 160</b>	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
<b>MTH 099 with MTH 104</b>	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
<b>MTH 104 with MTH 165 (FastTrack)</b>	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
<b>MTH 165 with MTH 175 (FastTrack)</b>	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***

#### Accelerating with Flexible Pace TRS 094

TRS 094 is offered in hybrid, remote/reduced (synchronous) and online (asynchronous) modalities.