

2019-2020 Pathway for Bachelor of Science in Mathematics (Applied Mathematics)

Please see your academic advisor to develop your individual plan. This is only meant to be a guide.

A maximum of 64 hours is transferable from a North Carolina Community College.

| Freshman/First Year | | | | | | | |
|-----------------------|--|--------------|-----------------------------|--|--|--------------|--------------------------|
| First Semester - Fall | | | | Second Semester - Spring | | | |
| CC Course | N.C. A&T Equivalent | Credit Hours | Required/Notes | CC Course | N.C. A&T Equivalent | Credit Hours | Required/Notes |
| MAT 271 | MATH 131 (MLAR) | 4 | UGETC: Math - AS | MAT 272 | MATH 132 (MLAR) | 4 | GEN ED: Mathematics |
| | MATH 105 | 1 | | ENG 112 <i>or</i> ENG 113 <i>or</i> ENG 114 | ENGL 101 (WC) | 3 | UGETC: Eng Comp- AA & AS |
| ENG 111 | ENGL 100 (WC) | 3 | UGETC: English Comp - AA/AS | | Foreign Language ¹ / Elective | 3 | |
| | Foreign Language ¹ / Elective | 3 | | | Math 140 | 3 | |
| | Global Awareness ² (GA) | 3 | | | MATH 106 | 1 | |
| ACA 122 | FRST 101 (SS) | 1 | AA/AS Req. Course | | AA Hist & Culture ⁴ (AA) | 3 | |

| Sophomore/Second Year | | | | | | | |
|------------------------------|---------------------|--------------|---|---------------------------|--------------------------------------|--------------|-----------------------------|
| Third Semester - Fall | | | | Fourth Semester - Spring | | | |
| CC Course | N.C. A&T Equivalent | Credit Hours | Required/Notes | CC Course | N.C. A&T Equivalent | Credit Hours | Required/Notes |
| MAT 273 | MATH 231 | 4 | GEN ED: Mathematics | | MATH 211 | 4 | |
| COM 110 <i>or</i> COM 111 | SPCH 250 (HFA) | 3 | GEN ED: Communications <i>or</i> Pre-Major/Elective | PHY 252 | PHYS 242 (SR) | 3 | UGETC: Natural Sciences -AS |
| | MATH 240 | 3 | | | PHYS 252 (SR) | 1 | |
| PHY 251 | PHYS 241 (SR) | 3 | UGETC: Natural Sciences -AS | | Social/Behav Sci. ⁵ (SBS) | 3 | |
| | PHYS 251 (SR) | 1 | | MAT 152 | MATH 224 | 3 | UGETC: Math- AA |
| | MATH 215 | 1 | | | | | |
| Total Credit Hours | | | | Total Credit Hours | | | |
| 15 | | | | 14 | | | |

| Junior/Third Year | | | | | | | |
|---------------------------|-------------------------------------|--------------|----------------|---------------------------|---------------------------------|--------------|----------------|
| Fifth Semester - Fall | | | | Sixth Semester - Spring | | | |
| CC Course | N.C. A&T Equivalent | Credit Hours | Required/Notes | CC Course | N.C. A&T Equivalent | Credit Hours | Required/Notes |
| | MATH 320 | 3 | | | MATH 341 | 3 | |
| | MATH 351 | 3 | | | MATH 340/365 | 3 | |
| | MATH 377 | 3 | | | App Area Electives ⁶ | 3 | |
| | App Area Electives ⁶ | 3 | | | STAT 324 | 3 | |
| | Ethical Reas. Elective ⁷ | 3 | | | Elective | 3 | |
| Total Credit Hours | | 15 | | Total Credit Hours | | 15 | |

| Senior/Fourth Year | | | | | | | |
|---------------------------|---------------------------------|--------------|----------------|---------------------------|---------------------------------|--------------|----------------|
| Seventh Semester - Fall | | | | Eighth Semester - Spring | | | |
| CC Course | N.C. A&T Equivalent | Credit Hours | Required/Notes | CC Course | N.C. A&T Equivalent | Credit Hours | Required/Notes |
| | MATH 432 | 3 | | | MATH 496 | 3 | |
| | App Area Electives ⁶ | 3 | | | App Area Electives ⁶ | 3 | |
| | App Area Electives ⁶ | 3 | | | Electives | 8 | |
| | Electives | 6 | | | | | |
| Total Credit Hours | | 15 | | Total Credit Hours | | 14 | |

Total Required Hours: 120

Listed below are NCAT courses:

¹Two courses of FREN 101, FREN 102; **or** GERM 101, GERM 102; **or** SPAN 101, SPAN 102; **or** RUSS 101, RUSS 102 taken in sequence.

²One course from: HIST 130, 207, 216 **or** PHIL 103 **or** 201.

³For students starting in MATH 103, MATH 104, **or** MATH 110, the programming courses should be replaced with electives in the first year. The GEEN 161 and MATH 240 should be taken prior to MATH 340/365. See the Mathematics Student Handbook for a sample program guide.

⁴One course from: HIST 103, 106, **or** 107, **or** LIBS 202, **or** MUSI 220.

⁵One course from: BUED 279, ECON 200 **or** 201, HIST 104 **or** 105, POLI 100, PSYC 101, **or** SOCI 100 **or** 200.

Statistics, Physical Sciences, Engineering and Applied Sciences, Life Sciences, or Business and Economics, and approved by the Applied Mathematics Undergraduate Program Committee. A list of suggested core courses for each of the applications areas is available from the Department of Mathematics.

⁷One course from: PHIL 104, 201, 263, 316, 317, **or** 320.

MAJOR PROGRAM REQUIREMENTS

Students must earn a C or better grade except one passing grade below C if the student has GPA of at least 2.0 but less than 2.3, or two passing grades below C if the student has GPA of at least 2.3 in the following courses:

| | |
|----------|-------------------------|
| MATH 105 | MATH 320 |
| MATH 106 | MATH 340/365 |
| MATH 131 | MATH 341 |
| MATH 132 | MATH 351 |
| MATH 211 | MATH 377 |
| MATH 215 | MATH 432 |
| MATH 224 | MATH 496 |
| MATH 231 | STAT 328 |
| MATH 240 | App. Area Electives (5) |

All of your GEN ED and UGETC requirements are satisfied, if you have earned an Associate in Arts or Associate in Science Degree from a North Carolina Community College.