# Bachelor of Science –Applied Mathematics Major – Biology Minor

## Four Year (120 credits)

**2023/2024** [Program Requirements](https://www.athabascau.ca/calendar/2023/undergraduate/program-regulations/degrees/bachelor-of-science-applied-mathematics-major.html) - Effective September 1, 2023

This program plan will assist you in planning your program. You must follow the official program requirements for the calendar year in which you are enrolled.

Please contact [FST Student Success Centre](http://scis.athabascau.ca/contact-us/index.php) for program planning assistance.

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| **Course Level Legend**JUNIOR / JR - 200 numbered courseSENIOR / SR - 300 or 400 numbered coursePREPARATORY - 100 numbered course | **Course Progress Legend**TR - Transfer Credit AwardedC - Completed AU CourseIP - In Progress AU Course |

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| **LEVEL** | **TOTALCREDITS** | **COURSE** | **REQUIREMENT** | **COURSE PROGRESS** | **COMMENTS** |
| Junior | 3 | [ENGL255](http://www.athabascau.ca/syllabi/engl/engl255.php)  | Required CoreEnglish Wiring Requirement |  | [Humanities](https://www.athabascau.ca/course/index.html?/undergraduate/humanities/all/) – ENGL255 is strongly recommended, can choose a different ENGL course as long as a minimum grade of B- is achieved |
| Junior | 6 | [COMP210](http://www.athabascau.ca/syllabi/comp/comp210.php) or [COMP200](http://www.athabascau.ca/syllabi/comp/comp200.php) | Required Core |  | [Science](https://www.athabascau.ca/course/index.html?/undergraduate/science/all/) – if you plan to take more COMP courses we recommend COMP200. |
| Junior | 9 | [MATH215](http://www.athabascau.ca/html/syllabi/math/math215.htm) or [MATH216](http://www.athabascau.ca/html/syllabi/math/math216.htm) | Required Core |  | [Science](https://www.athabascau.ca/course/index.html?/undergraduate/science/all/) |
| Junior | 12 | [MATH265](http://www.athabascau.ca/html/syllabi/math/math265.htm) | Required Core |  | [Science](https://www.athabascau.ca/course/index.html?/undergraduate/science/all/) |
| Junior | 15 | [MATH270](https://www.athabascau.ca/syllabi/math/math270.html) | Major Core |  | [Science](https://www.athabascau.ca/course/index.html?/undergraduate/science/all/) |
| Junior | 18 | [MATH266](https://www.athabascau.ca/syllabi/math/math266.html) | Major Core |  | [Science](https://www.athabascau.ca/course/index.html?/undergraduate/science/all/) |
| Junior | 21 | [MATH271](https://www.athabascau.ca/syllabi/math/math271.html) | Major Core |  | [Science](https://www.athabascau.ca/course/index.html?/undergraduate/science/all/) |
| Jr/Sr | 24 | [MATH](https://www.athabascau.ca/course/index.html?/undergraduate/science/mathematics/) | Major Elective |  | [Science](https://www.athabascau.ca/course/index.html?/undergraduate/science/all/) |
| Junior | 27 | [BIOL204](https://www.athabascau.ca/syllabi/biol/biol204.html) | Minor Core |  | [Science](https://www.athabascau.ca/course/index.html?/undergraduate/science/all/) – Lab Component |
| Junior | 30 | [BIOL205](https://www.athabascau.ca/syllabi/biol/biol205.html) or [BIOL207](https://www.athabascau.ca/syllabi/biol/biol207.html) | Minor Core |  | [Science](https://www.athabascau.ca/course/index.html?/undergraduate/science/all/) – Lab Component |
| Jr/Sr | 33 | [BIOL](https://www.athabascau.ca/course/index.html?/undergraduate/science/biology/) | Minor Electives |  | [Science](https://www.athabascau.ca/course/index.html?/undergraduate/science/all/) |
| Jr/Sr | 36 | [BIOL](https://www.athabascau.ca/course/index.html?/undergraduate/science/biology/) | Minor Electives |  | [Science](https://www.athabascau.ca/course/index.html?/undergraduate/science/all/) |
| Jr/Sr | 39 | [BIOL](https://www.athabascau.ca/course/index.html?/undergraduate/science/biology/) | Minor Electives |  | [Science](https://www.athabascau.ca/course/index.html?/undergraduate/science/all/) |
| Jr/Sr | 42 | [BIOL](https://www.athabascau.ca/course/index.html?/undergraduate/science/biology/) | Minor Electives |  | [Science](https://www.athabascau.ca/course/index.html?/undergraduate/science/all/) |
| Jr/Sr | 45 |  | Option |  | [Social Science](https://www.athabascau.ca/course/index.html?/undergraduate/social-science/all/) |
| Jr/Sr | 48 |  | Option |  | [Social Science](https://www.athabascau.ca/course/index.html?/undergraduate/social-science/all/) |
| Senior | 51 | [PHIL333](http://www.athabascau.ca/html/syllabi/phil/phil333.htm) or [PHIL371](http://www.athabascau.ca/html/syllabi/phil/phil371.htm) | Required Core |  | [Humanities](https://www.athabascau.ca/course/index.html?/undergraduate/humanities/all/) |
| Senior | 54 | [SCIE326](http://www.athabascau.ca/html/syllabi/scie/scie326.htm) | Required Core |  | [Science](https://www.athabascau.ca/course/index.html?/undergraduate/science/all/) |
| Senior | 57 | [MATH309](https://www.athabascau.ca/syllabi/math/math309.html) | Major Core |  | [Science](https://www.athabascau.ca/course/index.html?/undergraduate/science/all/) |
| Senior | 60 | [MATH315](https://www.athabascau.ca/syllabi/math/math315.html) | Major Core |  | [Science](https://www.athabascau.ca/course/index.html?/undergraduate/science/all/) |
| Senior | 63 | [MATH365](https://www.athabascau.ca/syllabi/math/math365.html) | Major Core |  | [Science](https://www.athabascau.ca/course/index.html?/undergraduate/science/all/) |
| Senior | 66 | [MATH366](https://www.athabascau.ca/syllabi/math/math366.html) | Major Core |  | [Science](https://www.athabascau.ca/course/index.html?/undergraduate/science/all/) |
| Senior | 69 | [MATH370](https://www.athabascau.ca/syllabi/math/math370.html) | Major Core |  | [Science](https://www.athabascau.ca/course/index.html?/undergraduate/science/all/) |
| Senior | 72 | [MATH376](https://www.athabascau.ca/syllabi/math/math376.html) | Major Core |  | [Science](https://www.athabascau.ca/course/index.html?/undergraduate/science/all/) |
| Senior | 75 | [MATH476](https://www.athabascau.ca/syllabi/math/math476.html) | Major Core |  | [Science](https://www.athabascau.ca/course/index.html?/undergraduate/science/all/) |
| Senior | 78 | [MATH](https://www.athabascau.ca/course/index.html?/undergraduate/science/mathematics/) | Major Elective |  | [Science](https://www.athabascau.ca/course/index.html?/undergraduate/science/all/) |
| Senior | 81 | [MATH](https://www.athabascau.ca/course/index.html?/undergraduate/science/mathematics/) | Major Elective |  | [Science](https://www.athabascau.ca/course/index.html?/undergraduate/science/all/) |
| Senior | 84 | [BIOL](https://www.athabascau.ca/course/index.html?/undergraduate/science/biology/) | Minor Elective |  | [Science](https://www.athabascau.ca/course/index.html?/undergraduate/science/all/) |
| Senior | 87 | [BIOL](https://www.athabascau.ca/course/index.html?/undergraduate/science/biology/) | Minor Elective |  | [Science](https://www.athabascau.ca/course/index.html?/undergraduate/science/all/) |
| Senior | 90 |  | Option |  | [Any Area of Study](https://www.athabascau.ca/course/index.html?/undergraduate/all/all/) |
| Senior | 93 |  | Option |  | [Any Area of Study](https://www.athabascau.ca/course/index.html?/undergraduate/all/all/) |
| Senior | 96 |  | Option |  | [Any Area of Study](https://www.athabascau.ca/course/index.html?/undergraduate/all/all/) |
| Senior | 99 |  | Option |  | [Any Area of Study](https://www.athabascau.ca/course/index.html?/undergraduate/all/all/) |
| Senior | 102 |  | Option |  | [Any Area of Study](https://www.athabascau.ca/course/index.html?/undergraduate/all/all/) |
| Senior | 105 |  | Option |  | [Any Area of Study](https://www.athabascau.ca/course/index.html?/undergraduate/all/all/) |
| Senior | 108 | [SCIE480](http://www.athabascau.ca/syllabi/scie/scie480.php) or [COMP494](http://www.athabascau.ca/syllabi/comp/comp494.php) | Required Core |  | [Science](https://www.athabascau.ca/course/index.html?/undergraduate/science/all/) |
| Senior | 111 |  | Option |  | [Science](https://www.athabascau.ca/course/index.html?/undergraduate/science/all/) |
| Senior | 114 |  | Option |  | [Science](https://www.athabascau.ca/course/index.html?/undergraduate/science/all/) |
| Senior | 117 | [MATH480](https://www.athabascau.ca/syllabi/math/math480.html) | Major Core |  | [Science](https://www.athabascau.ca/course/index.html?/undergraduate/science/all/) |
| Senior | 120 | [MATH495](https://www.athabascau.ca/syllabi/math/math495.html) | Major Core |  | [Science](https://www.athabascau.ca/course/index.html?/undergraduate/science/all/) |

**Overall Program Requirements**

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| **Minimums** |
| 30 credits – Residency requirement (courses through AU) |
| 15 credits – Residency requirement in the major (courses through AU) |
| 9 credits – Residency Requirement in the minor (courses through AU) |
| 75 credits – **Senior** (300/400) level  |
| 45 credits – **Senior** (300/400) level **Science**  |
| 15 credits – **Senior Science credits at the 400 level** |
| 6 credits – In Social Science  |
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| **Maximums** |
| 72 credits – In **any one Science discipline** |
| 12 credits – Amount of senior project credits (495/496) |
| 6 credits – At the preparatory (100) level |
| 30 credits – Prior Learning Assessment and Recognition (PLAR) |