**Sample 4-yr Plan of Study – BS Degree in Quantitative Risk Analytics – MSU**

9/20/18 120 credits needed to graduate Minimum 2.0 overall GPA; Minimum 2.0 major courses GPA

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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  |  | First Year | | Second Year | | Third Year | | Fourth Year | | Total Credits |
|  |  |  | Fall | Spring | Fall | Spring | Fall | Spring | Fall | Spring |
| Major  Requirements  (Mathematics) | course  title  (credits) |  | MTH 132  Calculus I  3 | MTH 133  Calculus II  4 | MTH 234  Multivariable Calculus  4 | MTH 299  Transitions  4 | MTH 235  Differential Equations  3 | MTH 457  Financial Mathematics  3 | MTH 467  Insurance Concepts A  3 |  | 33 |
|  |
|  |
| course  title  (credits) |  |  |  | MTH 360  Theory of Math Interest  3 | MTH 361  Theory of Math Interest II  3 | MTH 309  Linear Algebra  3 |  |  |  |
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|  |
| Major  Requirements  (Statistics) | course  title  (credits) |  |  |  |  | STT 441  Probability  3 |  | STT 442  Statistics  3 |  | STT 468  Insurance  Concepts B  3 | 9 |
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| course  title  (credits) |  |  |  |  |  |  |  |  |  |
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| Major  Requirements  (Finance, Econ, Computer Sci) | course  title  (credits) |  | ACC 230  Survey of Accounting  3 | EC 201  Intro to Micro  Economics  3 |  |  | FI 311  Financial Management  3 | FI 321  Theory of  Investments  3 |  |  | 19 |
|  |
|  |
| course  title  (credits) |  |  |  | CSE 231  Intro to Programming  4 |  | EC 202  Intro to Macro  Economics  3 |  |  |  |
|  |
|  |
| University  Requirements | course  title  (credits) |  | WRA 101  Writing Course  4 | IAH 20\*  (Arts & Humanities)  4 |  |  | ISS 2\*\*  (Integrated  Soc Sci)  4 | ISS 3\*\*  (Integrated Soc Sci)  4 | IAH 211+  (Arts & Humanities)  4 |  | 20 |
|  |
|  |
| Natural Science  Requirements | course  title  (credits) |  | CEM 141/161  General Chem/Lab  4+1 | CEM 142  Gen & Inorg Chem  3 | PHY 183  Physics I  4 | PHY 184  Physics II  4 |  | Any 1 of Biology electives  3 |  |  | 19 |
|  |
|  |
| Electives | course  title  (credits) |  |  |  |  |  |  |  | ELEC  8 | ELEC  12 | 20 |
|  |
| Total credits | |  | 15 | 14 | 15 | 14 | 16 | 16 | 15 | 15 | 120 |

**\* Internship is traditionally held over summer between 3rd and 4th year and should be the primary choice. However, for those unable to secure an internship, an advanced course in Mathematics, Statistics, Finance or Computer Science may be substituted to fulfil the requirement.**