Actuarial Science--Finance Option Honours Plan

2020-2021 calendar

| 20. | 20-2021 calendar | | | | 1 | | I | |
|-----|-------------------------------|---------------|---|---|-----------|-----------|-----------|--|
| | Cauraa | Year/ Term | Torio | D | Offering | SOA avama | CAS avama | Comments |
| | Course CS 115 or CS 135 or | | Topic | Pre-reqs | Offering | SOA exams | CAS exams | * a few other options - see first year |
| 1 | CS 145 * | 1A | CS Core I | | FWS | | | advisor if you have issues |
| 2 | MATH 135/145 | 1A | Algebra | | FWS | | | |
| 3 | MATH 137/147 | 1A | Calculus I | | FWS | | | |
| | | 1A | Course from English Language Competency | | | | | |
| 4 | Math English course | | requirements list | | FWS | | | > CON/ as a subset for a desirate at a ACTCC |
| 5 | MTHEL 131 | 1 | Intro to Actuarial Practice | | FWS | | | ≥60% required for admission to ACTSC |
| 6 | CS 116 or CS 136 or CS 146 | 1B | CS Core II | CS Core I | FWS | | | * a few other options - see first year advisor if you have issues |
| 7 | MATH 136/146 | 1B | Linear Algebra 1 | ≥60% in M135 | FWS | | | |
| 8 | MATH 138/148 | 1B | Calculus II | ≥60% in M137 | FWS | | | |
| 9 | ECON 101 | 1 | Intro microeconomics | 200 /6 111 101137 | FWS | VEE-E | VEE-E | |
| 10 | ECON 101 | 1/2 | Intro macroeconomics | | FWS | VEE-E | VEE-E | |
| 10 | ECON 102 | | | | 1 445 | VLL L | VLL L | |
| 11 | AFM 101 | 1 | Introduction to Financial Accounting | | FWS | VEE-AF | VEE-AF | |
| | | 1/2 | Introduction to managerial accounting | | | | | |
| 12 | AFM 102 | 2A | | AFM101 | WS | | | |
| 13 | MATH 235/245 | | Linear Algebra 2 | ≥60% in M136, Coreq M138 | FWS | | | |
| 14 | MATH 237/347 | 2A | Calculus 3 | ≥60% in M136,≥60% in M138 | FWS | | | |
| 15 | STAT 230/240 | 2A | Probability | M. 137 >80% or M138 | FWS | P | Р | |
| 16 | ACTSC 231 | 2A | Introductory Financial Mathematics | M137, level 2A, Coreq S230 | FWS | FM | FM | |
| 17 | AMATH 250 | 2 | Introductory Financial Mathematics Intro to diff equations | M138 | FWS | 1.171 | | |
| 18 | STAT 231/241 | 2B | Statistics | M138,S230 | FWS | | | |
| | , | 2B | | | | | | |
| 19 | ACTSC 232 | 2/3 | Life Contingencies 1 | ≥60% in AS231, ≥60% in MTHEL 131, S.230 | FWS | LTAM | | + |
| 20 | ACTSC 371 | 3 | Introduction to Investments | Coreq S231 | FWS | IFM | IFM | |
| 21 | ACTSC 372 | | Corporate Finance | AS371, M237 | FWS | VEE - AF | | First offerior in Winter 2021 |
| 22 | ACTSC 363 | 3A 3A | Casualty and Health Insurance Mathematics 1 | Coreq S330 | FW (S-?) | STAM | | First offering is Winter 2021 |
| 23 | ACTSC 331 | 3A | Life Contingencies 2 | ≥60% in AS232 | FWS | LTAM | | |
| 24 | One of: | | | | | | | |
| | AMATH 242/CS 371 | 3 | Introduction to Computational Mathematics | (CS 116 or 136 or 138 or 146), M 235/245, M237/247 | WS | | | |
| | , | 3 | | M 136, M138, (CS 234 or CS 241 or | | | | |
| | CS 370 | | Numerical Computation | CS 246) | FWS | | | |
| 25 | STAT 330 | 3 | Mathematical Statistics | M237, ≥60% in S230,S231 | FWS | VEE-MS | | |
| 26 | STAT 331 | 3 | Applied linear models | M235, ≥60% in S231 | FWS | SRM, PA | MAS-I | |
| 27 | STAT 333 | 3 | Applied probability | ≥60% in S230, level 3A | FWS | | MAS-I | |
| | | | Professional Communications in Statistics | (AS331 or S331),≥70% in EMLS 101R, 102R, EMLS/ENGL 129R, | | | | |
| 28 | ENGL 378/MTHEL 300 | 3B/4 | and Actuarial Science | ENGL 109, SPCOM 100, 223 | FWS | PA | | |
| 29 | STAT 340 | 3/4 | Stochastic Simulation Methods | ≥60% in S230, S231,CS Core II | WS | | | STAT 341 is NOT accepted |
| 30 | ACTSC 431 | 4 | Casualty and Health Insurance Mathematics 2 | ≥60% in A363, S330 | FS | STAM | | First offering is Spring 2021 |
| | | 4 | | (AS231,371), (S330 and 333 or 334) | | | | |
| 31 | ACTSC 445 | | Quantitative Enterprise Risk Management | | FS | | | |
| 32 | ACTSC 446 | 4 | Mathematics of Financial Markets | (AS231,371),(S333 or 334) | FW | IFM | IFM | |
| | | 4 | Numerical Computation for Financial | CS 370 or AMATH 232/CS 371, S231 | | | | |
| 33 | CS 476 | | Modeling | | W | | | |
| 34 | One of: | | | | | | | |
| Ш | ACTSC 471/AFM 476 | 4 | Advanced corporate finance | AS372 | W | | | |
| | AFM 424 | 3/4 | Equity Investments | AS372 | FW | | | |
| | | | 1 | | | | | |
| + | 1 Additional 400 level | ACTSC | courses; currently available courses include: | | 1 | | | |
| - | ACTSC 432 | 4 | Property & Casualty Insurance: Pricing | A363, S330, S331/371 | FS | STAM | MAS-II | |
| | ACTOC 402 | | opercy a cusualty insulance, ritchig | nooo, 0000, 0001/01 I | W (odd | 2101/1 | MA3 11 | |
| | ACTSC 453 | 4 | Basic Pension Mathematics | AS331 | years) | | | |
| | ACTSC 454 | 4 | Longevity and Mortality using Predictive Analytics | AS331,S330 | W | LTAM | | Formerly ACTSC 433 |
| | A CTC 2 155 | | | .00%: 4000: | , | | | |
| | ACTSC 455 | 4 | Life Contingencies 3 | ≥60% in AS331, co-req A446 | W (not | LTAM | | + |
| | ACTSC 463 | 4 | Intro to Property & Casualty Loss Reserving | A363, S331/371 | certain) | STAM | Exam 5 | |
| | | | , | | | | | |
| | | | | | | | | |
| + | 5 Additional courses of | f which : | I at least 3 must be outside the math faculty (| 2 if AFM 424 is taken) | | | | |
| - | 5aaraonar courses 0 | · •••••CII | ac reast 5 mast be outside the math racuity (| 2 7 1 12 + 13 taken) | | | | |
| | Students who want | a doub | le major with Statistics must have STAT | 332 and a total of 3 STAT AV | X courses | | | |
| | Stadents WIIO WAIIL | a aoabi | S major with Statistics must have STAT | 352 and a total UI 3 SIMT 4X | COUISES | | | |
| | Total 40 course | | | | 1 | | | |
| | i otal 40 course | -5 | | | 1 | | | I . |

^{*}AFM 424 and ACTSC 471/AFM 476 can not be double counted on the 2 Additional list and as a specific requirement (#33). If you want them to count under the 1 Additional list, you MUST complete both.

Aug-2

SOA and CAS exam mappings are intended to be a guideline for students.

The entire CAS MAS-II syllabus cannot be directly mapped to the program's courses. In addition to the courses indicated above, students preparing for this exam may also consider taking STAT 430, STAT 441, STAT 442, STAT 450 and STAT 440.