Computing Science - Software Practice Option Major Requirements (78)

Foundation Courses
- ☐ CMPUT 174 - Introduction to the Foundations of Computation I (See Note 1)
- ☐ CMPUT 175 - Introduction to the Foundations of Computation II (See Note 1)
- ☐ MATH 125 - Linear Algebra I

3 units from:
MATH 134 - Calculus for the Life Sciences I
MATH 144 - Calculus for the Mathematical and Physical Sciences I   _____
MATH 154 - Calculus for Business and Economics I

3 units from:
MATH 136 - Calculus for the Life Sciences II
MATH 146 - Calculus for the Mathematical and Physical Sciences II   _____
MATH 156 - Calculus for Business and Economics II

3 units from:
STAT 151 - Introduction to Applied Statistics I
STAT 235 - Introductory Statistics for Engineering
STAT 265 - Probability and Statistics I   _____

Senior Courses
- ☐ CMPUT 201 - Practical Programming Methodology (See Note 1)
- ☐ CMPUT 204 - Algorithms I
- ☐ CMPUT 229 - Computer Organization and Architecture I
- ☐ CMPUT 272 - Formal Systems and Logic in Computing Science
- ☐ CMPUT 291 - Introduction to File and Database Management
- ☐ CMPUT 301 - Introduction to Software Engineering
- ☐ CMPUT 325 - Non-Procedural Programming Languages
- ☐ CMPUT 379 - Operating System Concepts
- ☐ CMPUT 401 - Software Process and Product Management
- ☐ CMPUT 402 - Software Quality

> **Notes**
> Students may replace CMPUT 174 with CMPUT 274, and CMPUT 175 with CMPUT 275. Students who take CMPUT 275 cannot take CMPUT 201 for credit. Upper level CMPUT courses may require specific CMPUT, MATH or STAT courses as prerequisites. These prerequisites must be considered when choosing Science options.

3 units from:
STAT 252 - Introduction to Applied Statistics II
STAT 266 - Probability and Statistics II

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3 units from:
CMPUT 200 - Ethics of Data Science and Artificial Intelligence
CMPUT 300 - Computers and Society

_____

3 units from:
CMPUT 304 - Algorithms II
CMPUT 340 - Introduction to Numerical Methods   _____
CMPUT 474 - Formal Languages, Automata, and Computability

6 units from:
CMPUT at the 300 and/or 400-level

_____

_____

3 units from:
CMPUT at the 400-level

_____

- ☐ COMM
- ☐ COMM
- ☐ IND
- ☐ BO___
- ☐ BO___
- ☐ BSBS
- ☐ BSFS
- ☐ BSSS
- ☐ LAB

6 units from*:
BTM, MGTSC and/or OM

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_____

6 units from*:
Courses offered by the Faculty of Business

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*except for BTM 211, BTM 415, BTM 419, and MGTSC 212

Please see the UofA Calendar for details on the Science Internship Program requirement for this degree.   Aug 7/24 GD