GEOGRAPHIC INFORMATION SCI6hE55 Tm [(w)16.6 (w)16.6 ((A)32i3E q[(w)8NF)1 (OR:)1055 Tm [(/ Tm [

Lower Division (57 units)

- CMPT/MACM/MATH/ STAT/GEOG (45 units)
- WQB courses (12 units)



- Upper Division (45 units)CMPT/MACM/MATH (21 units)GEOG (24 units)



General Electives



120 Units Overall

OPTIONAL REQUIREMENTS:

CMPT 426 or GEOG 302

CMPT 427 OR GEOG 303

CMPT 428 OR GEOG 402

CMPT 429 OR GEOG 403

CMPT 430 OR GEOG 409

LOWER DIVISION REQUIREMENTS (or equivalents):

- CMPT 130 and 135 may substitute CMPT 120, 125 and 127.
- WQB requirements: Students are required to complete 6 units of writing (W), 6 units of Breadth Science (B-Sci), 6 units of Breadth Social Science (B-Soc), 6 units of Breadth Humanities (B-Hum) and 6 units of Undesignated Breadth (UB).
- Students in the Molecular Biology and Biochemistry and Computing Science joint major automatically fill most of the WQB requirements with the exception of the lower division W course, 6 units of Breadth Social Science and 6 units of Breadth Humanities.

UPPER DIVISION REQUIREMENTS:

- Students must complete at least 45 upper division credits, which include:
 - All of the following: CMPT 307, CMPT 354, CMPT 361, CMPT 376W
 - One of the following: CMPT 300, CMPT 363, CMPT 371 & CMPT 384
 - Three of the following: GEOG 351, GEOG 352, GEOG 353, GEOG 355 & GEOG 356
 - Two of the following: CMPT 419, CMPT 412, CMPT 454, CMPT 461 & CMPT 470
 - Two of the following: GEOG 451, GEOG 453, GEOG 455 & GEOG 457
 - Four additional upper division units in physical or human geography. Students should consult with the program advisor when choosing these units
 - Three additional upper division units in CMPT or MACM courses
 - Writing requirement: CMPT 105W & CMPT 376W or GEOG 322W/389W/455Wu (C)3 (M)-0.7 (C316.5 (u)-0.-0.6 (m)2.9 (26 ()-136 (ph)