

GEOGRAPHY, GEOGRAPHIC INFORMATION SYSTEMS MAJOR – B.S.

<p>Geography-Earth Science (39+ Cr)</p> <p><u>Required Geography Core (15 Cr)</u> GEO 105 Physical Geography <input type="checkbox"/> GEO 202 GIS I: Intro to GIS <input type="checkbox"/> GEO 230 Economic Geography <input type="checkbox"/> GEO 244 Land Use or 322 Urban Geography <input type="checkbox"/> GEO 391 Geography Seminar <input type="checkbox"/></p> <p><u>GIS Core Courses (12 Cr)</u> (all are required) GEO 339 Remote Sensing <input type="checkbox"/> GEO 352 Cartography <input type="checkbox"/> GEO 363 GIS II: Intermediate GIS <input type="checkbox"/> GEO 420 GIS III: Advanced GIS <input type="checkbox"/></p> <p><u>GIS Technical Electives (6 Cr)</u> (select 2) GEO 425 Image Processing <input type="checkbox"/> GEO 440 Field Techniques I <input type="checkbox"/> GEO 441 Quantitative Methods <input type="checkbox"/> GEO 463 Applied Geophysical Imaging <input type="checkbox"/> GEO 4___ Geography 400 Level Elective <input type="checkbox"/></p> <p><u>Geography Content Electives (3cr)</u> (Select 1) GEO 244 Land Use <input type="checkbox"/> GEO 301 Biogeography <input type="checkbox"/> GEO 310 Transportation Geography <input type="checkbox"/> GEO 322 Urban Geography <input type="checkbox"/> GEO 427 Environmental Sustainability <input type="checkbox"/> GEO 444 Env Land Use Planning <input type="checkbox"/></p> <p><u>Internship (3+ Cr)</u> GEO 360 Internship <input type="checkbox"/> Must have 2.0 overall and major GPA, and Junior status.</p>	<p>Allied Sciences (18 Cr)</p> <p><u>Social Sciences (6 Cr)</u> (select 2) PHL 332 Ethical Issues and Comp Tech <input type="checkbox"/> PLS 231 State and Local Government <input type="checkbox"/> PLS 271 Introduction to Public Administration <input type="checkbox"/> PLS 331 City Politics and Administration <input type="checkbox"/> PLS 431 Pennsylvania Local Government <input type="checkbox"/> SOC 220 Social Stratification <input type="checkbox"/> SOC 346 City and Community <input type="checkbox"/> SOC 363 Population Problems <input type="checkbox"/></p> <p><u>Art/Computer Science/IMS (9+ Cr)</u> ART 217 Computer Design I <input type="checkbox"/> CSC 110 Computer Science I (3) + CSC 106 Lab (1) <input type="checkbox"/> CSC 111 Computer Science II (4) <input type="checkbox"/> CSC ____ by advisement <input type="checkbox"/> MIS 142 Business Computer Systems <input type="checkbox"/> MIS 240 Intro to Programming Concepts <input type="checkbox"/> MIS 300 Info Tech and Business Operations <input type="checkbox"/> MIS 355 Database Applications <input type="checkbox"/></p> <p><u>Math (3+ Cr)</u> (select 1) MAT 140A College Algebra (4)* <input type="checkbox"/> MAT 140B College Algebra (3)* <input type="checkbox"/> MAT 175 Precalculus <input type="checkbox"/> MAT 211 Calculus <input type="checkbox"/> MAT 225 Discrete Mathematics <input type="checkbox"/></p> <p><u>Technical Writing (3 Cr)</u> (required) ENG 238 Technical/Professional Writing <input type="checkbox"/></p> <p style="text-align: center; margin-top: 20px;">* MAT 140B is for students with a math placement level of 4 or higher and is the standard algebra course. MAT 140A is for students with a math placement level 3.</p>	<p>General Education Requirements (45 CR)</p> <p>Courses filled-in below are <i>DIRECTED general education classes that MUST be taken for the major</i>. All other general education courses can be chosen from the list on the back of this page.</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <th colspan="3">Foundations^a (15 cr total)</th> </tr> <tr> <td>U</td> <td style="text-align: center;">3</td> <td>Course(s)</td> </tr> <tr> <td>W</td> <td style="text-align: center;">3</td> <td></td> </tr> <tr> <td>O</td> <td style="text-align: center;">3</td> <td></td> </tr> <tr> <td>H</td> <td style="text-align: center;">3</td> <td></td> </tr> <tr> <td>Q</td> <td style="text-align: center;">3</td> <td>MAT 117</td> </tr> <tr> <td colspan="3">^a One course in each area are required.</td> </tr> <tr> <th colspan="3">Interconnections (9 cr total)</th> </tr> <tr> <td>D^b</td> <td style="text-align: center;">3+</td> <td>Course(s)</td> </tr> <tr> <td>G^b</td> <td style="text-align: center;">3+</td> <td></td> </tr> <tr> <td>F</td> <td style="text-align: center;">e</td> <td></td> </tr> <tr> <td colspan="3">^b At least 1 course each from D and G.</td> </tr> <tr> <th colspan="3">Citizenship^c (6 cr total)</th> </tr> <tr> <td>S</td> <td style="text-align: center;">e</td> <td>PLS 100</td> </tr> <tr> <td>E</td> <td style="text-align: center;">e</td> <td></td> </tr> <tr> <td>R</td> <td style="text-align: center;">e</td> <td>SOC 101</td> </tr> <tr> <td colspan="3">^c PLS 100 and Soc 101 required.</td> </tr> <tr> <th colspan="3">Natural World (9cr total)</th> </tr> <tr> <td>N^d</td> <td style="text-align: center;">6+</td> <td>Course(s)</td> </tr> <tr> <td>T</td> <td style="text-align: center;">e</td> <td>CSC 104</td> </tr> <tr> <td colspan="3">^d At least 2 courses from N. 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