

## Transfer Planning Sheet (SUNY Broome) Geographic Information Systems (GIS)

The following SUNY Cortland courses are recommended by the department to complete prior to transfer. The transfer credit limit from a 2-year college is 64 credits. All classes are three (3) credits unless otherwise noted. [SUNY Transfer Path](#) courses are underlined and notated in blue. Transfer students who have completed SUNY General Education prior to attending SUNY Cortland will have met their General Education requirements at SUNY Cortland.

SUNY General Education/Cortland Degree Requirements (30-31 credits) Course I will complete at my current college:

- |  |  |
|--|--|
| <ul style="list-style-type: none"> <li>○ Communication 1 (GEC1)*<br/>CPN 100 Writing Studies I</li> <li>○ Communication 2 (GEC2)*<br/>CPN 101 Writing Studies II</li> <li>○ Communication – Presentation (GECp)*</li> <li>○ Diversity: Equity, Inclusion &amp; Social Justice (GEDI)*</li> <li>○ Mathematics (GEMA)*</li> <li>○ Natural Sciences (GENS)* (3-4 cr)</li> <li>○ Humanities (GEHU)</li> <li>○ The Arts (GEAR)</li> <li>○ US History &amp; Civic Engagement (GEUS)</li> <li>○ World Languages (GEWL)**</li> </ul> | <p>ENG 110</p> <p>ENG 111</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p> |
|--|--|

\*Indicates required SUNY General Education Category

\*\*A foreign language course at the beginning level I (101) is required for this major. Sign language is NOT an acceptable language for this major.

Major Requirements (6 credits):

- |   |                               |
|---|-------------------------------|
| <ul style="list-style-type: none"> <li>○ CAP 100 Introduction to Computer Applications</li> <li>○ GRY 120 Cultural Geography<br/>(will also fulfill GE World History &amp; Global Awareness)</li> </ul> | <p>CST 105</p> <p>GEO 120</p> |
|---|-------------------------------|

Electives (27-28 credits)

GIS Computer Techniques Concentration Options

- |  |   |
|--|---|
| <ul style="list-style-type: none"> <li>○ MCS 186 Introductory Programming</li> </ul> | <p>Choose One: CST 113/127/133/138/150W</p> |
|--|---|

GIS Demographics and Business Geographics Concentration Options

- |   |  |
|---|--|
| <ul style="list-style-type: none"> <li>○ ECO 221 Economic Statistics or MAT 201 Statistical Methods</li> <li>○ MGT 253 Principles of Marketing</li> </ul> | <p>BUS 115 or MAT 124</p> <p>BUS 141</p> |
|---|--|

GIS Environmental Science Concentration Options

- |   |                         |
|---|-------------------------|
| <ul style="list-style-type: none"> <li>○ EST 100 Introduction to Environmental Studies</li> </ul> | <p>CHM 123 AND 123L</p> |
|---|-------------------------|

Choose two of the following:

- |  |  |
|--|--|
| <ul style="list-style-type: none"> <li>○ GLY 261 Physical Geology</li> <li>○ GLY 371 Meteorology</li> <li>○ GLY 397 Physical Oceanography</li> </ul> | <p>GLG 115</p> <p>PHS 114</p> <p>PHS 226</p> |
|--|--|

Total: 64

# Geographic Information Systems

## School of Arts and Sciences

The program requirements pertain to the Undergraduate Catalog and are intended as a guide for academic planning. Students currently on SUNY campuses should consult their academic advisor for additional choices in general education categories when any course is recommended.

- To view all required courses for the program and Cortland's General Education courses, see the most current undergraduate [Catalog](#).
- **Students must add a concentration to this program.** You can choose from Advanced Geospatial Applications, Computer Techniques, Demographics and Business Geographics, or Environmental Science.
- Use the [transfer equivalency tables](#) to choose equivalents at your transfer college.
- If you plan to transfer before you complete your associate's degree, you can still earn your degree via [Reverse Transfer](#).

## About Geographic Information Systems

Prepare to strategically solve real-world problems and come up with cutting-edge solutions through a combination of **technology and business skills**. You'll learn the nature of **geographic data while recognizing** the appropriate applications of GIS technology to solve spatial issues.

## Career Potential

- Environmental GIS specialist
- Land use planner
- Marketing and business geographics consultant
- Law enforcement analyst
- Transportation planner
- Emergency response planner

## What Will I Learn?

You will receive computer training in

- digital processing of remote sensing observations and cartographic vector data.
- spatial analysis.
- the display of information products in ENVY and GIS software.

The curriculum will provide you with the necessary background to use remote sensing in various fields such as

- military analysis and intelligence.
- environmental monitoring.
- counter-narcotics.
- disaster assessments.
- law enforcement and other related fields.

## Applying to Cortland

- SUNY Cortland accepts the Common Application and the SUNY Online [application](#). Choose just one way to apply; both require a \$50 non-refundable application fee.
- If you apply to Cortland using the SUNY application, SUNY will waive the \$50 application fee for transfer students graduating with an associate degree from a SUNY or CUNY college, who apply directly to Cortland for baccalaureate programs.
- Fall applicants should apply by March 1. Spring applications should apply by November 1.
- After [applying](#), students must send transcripts from all colleges attended and a high school transcript.