Please type or print in ink:

Name (first/last): 

GT Student ID Number: 

GT Email Address: 

Daytime Phone: 

Major: 

Anticipated Graduation Date: 

In addition to the guidelines listed below, you are responsible for reviewing and following the general guidelines for minors: [http://www.catalog.gatech.edu/academics/minorguide.php](http://www.catalog.gatech.edu/academics/minorguide.php)

This minor must comprise at least 15 semester hours, of which at least 9 semester hours are upper-division coursework (numbered 3000 or above).

- CS 1331 prerequisite for the minor required (this course does NOT count toward the 15 hours required for minor)
- A CS Minor application is required
- No Special Problems or Internship coursework may be used towards the CS minor.
- A grade of A or B is required for CS 1301/1315/1371 and CS 1331. All other minor courses must be completed with a grade of C or higher.

A. **Required courses 6 hours:** CX 4240, CX 4242

B. **Choose 3 credit hours from below for Introduction to Probability and Statistics:**
   - MATH 3215, MATH 3225, ECE 3077, ISYE 2027

C. **Choose 3 credit hours from below for Computational Methods:**
   - CX 4010, CS 4400, CS 4460

D. **Choose 3 credit hours from below for Elective:**
   - BIOL 4150, CEE 3010, CS 3530, CS 4400, CS 4460, CS 4495, CX 4010, CX 4803-SUS (Computational Sustainability)
   - EAS 4430, EAS 4480, ECE 4270, ECE 4560, ECE4580
   - ECE 4823 (Game Theory and Multi-agent Systems), ISYE 4311, ISYE 3232
   - MGT 4067, MGT 4068, PSYC 4031

See notes on page below for additional details and requirements.

It is the **major advisor's responsibility** to verify that students are using only courses from the designated block(s) from the student’s major field of study that are allowed to satisfy a minor program, that they are not using any Core Area A-E courses (including humanities and social sciences), and that they are not using any courses for more than one minor or certificate. Any free elective course used to satisfy the course requirements of the student’s major degree program may also be used to satisfy the course requirements for a minor.

<table>
<thead>
<tr>
<th>Course and Section</th>
<th>Course Title</th>
<th>Credit Hours</th>
<th>Grade</th>
<th>Semester Completed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-requisite: CS 1331</td>
<td>Introduction to Object Oriented Programming</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>CX 4240</td>
<td>Introduction to Computing for Data Analysis</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CX 4242</td>
<td>Data and Visual Analytics</td>
<td>3</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Student Signature: 

Major School Signature: 

Minor School Signature:
Prerequisites
1. Math through Calculus III
2. CS 1371 Computing for Engineers

Required Core Courses (4 core courses)
1. CX 4240. Introduction to Computing for Data Analysis
2. Introduction to Probability and Statistics (one of the following: MATH 3215, MATH 3225, ECE 3077, ISYE 2027; students who have taken CEE/ISYE/MATH 3770 may be required to increase their background in probability, and will be considered on a case-by-case basis)
3. Computational Methods (one of CX 4010 - Computational Problem Solving for Scientists and Engineers (new course), CS 4400 - Introduction to Database Systems, or CS 4460 - Introduction to Information Visualization)
4. CX 4242. Data and Visual Analytics

Data Analysis Elective
Students will select one among a set of courses where they take an additional course in data analysis methods or systems, or may apply data analysis techniques in the context of a specific domain. A list of potential candidates appear below (additional courses may be approved by the minor coordinator or committee).

- ECE 4270 - Fundamentals of Digital Signal Processing
- ECE 4560 - Intro to Automation and Robotics
- ECE4580 - Computational Computer Vision
- ECE 4823 - Game Theory and Multiagent Systems*
- CS 3630 - Introduction to perception and Robotics
- CS 4400 - Introduction to Database Systems
- CS 4460 - Introduction to Information Visualization
- CS 4495 - Computer Vision
- CX 4010 - Computational Problem Solving for Scientists and Engineers
- ISYE 4311 - Capital Investment Analysis
- ISYE 3232 - Stochastic Manufacturing & Service Systems
- MGT 4067 - Financial Markets: Trading and Structure
- MGT 4803 - Introduction to Fixed Income*
- BIOL 4150 - Genomics & Applied Bioinformatics
- PSYC 4031 - Applied Experimental Psychology
- EAS 4430 - Remote Sensing and Data Analysis
- EAS 4480 - Environmental Data Analysis
- CEE 3010 – Geomatics

*A maximum of 6 semester hours of Special Topics courses may be included in a minor.

*A maximum of 3 semester hours of transfer credit may be used to satisfy the course requirements for a minor. This includes courses taken at another institution or credit earned through the AP or IB program, assuming the scores meet Georgia Tech minimum standards.