Approved Program of Study for Undergraduate Minors
Georgia Institute of Technology
Office of the Registrar
2014-2015
Minor in Computational Data Analysis

Please type or print in ink:

<table>
<thead>
<tr>
<th>Name (first/last):</th>
<th>GT Student ID Number:</th>
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<tbody>
<tr>
<td>GT Email Address:</td>
<td>Daytime Phone:</td>
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<tr>
<td>Major:</td>
<td>Anticipated Graduation Date:</td>
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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

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

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 3630, CS 4400, CS 4460, CS 4495, CX 4010,
   EAS 4430, EAS 4480, ECE 4270, ECE 4560, ECE 4580,
   ECE 4823 (Game Theory and Multi-agent Systems), ISYE 4311, ISYE 3232
   MGT 4067, MGT 4803 (Introduction to Fixed Income), PSYC 4031

See notes on page below for additional details.

It is the major advisor’s responsibility to verify that students are not using any courses required by name and number for their major, 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. Free electives and technical electives may be used towards minors.

List the courses completed for the requested minor:

<table>
<thead>
<tr>
<th>Course and Section</th>
<th>Course Title</th>
<th>Credit Hours</th>
<th>Grade</th>
<th>Semester Completed</th>
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<tbody>
<tr>
<td>CX 4240</td>
<td>Introduction to Computing for Data Analysis</td>
<td>3</td>
<td></td>
<td></td>
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<tr>
<td>CX 4242</td>
<td>Data and Visual Analytics</td>
<td>3</td>
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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
ECE 4580 - 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

*No more than 3 semester hours of Special Topics courses may be used. No more than 3 semester hours of Undergraduate Research may be used. No more than 3 semester hours of Special Problems courses may be used.