**CStoCMPE Program Overview**

*Points of Contact*

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**Overview**

The CStoCMPE is a partnership between Morehouse College and the Georgia Tech College of Electrical and Computer Engineering (ECE). It allows students majoring in computer science at Morehouse College to simultaneously take courses at Georgia Tech in Computer Engineering, with the goal of acquiring degrees from both institutions. Historically, students could pursue degrees from both institutions through the Dual Degree Engineering Program, however, the requirements of this program require more credit hours to complete than CStoCMPE. Programming will be implemented to support students interested in the program before they start their undergraduate programs. The partnership's intended outcome is to meet the demand for a skilled and diverse workforce in semiconductor production.

**Structure of the Partnership**

* Students in the program would major in Computer Science at Morehouse, with the goal of transferring to Computer Engineering at Georgia Tech and earning two bachelor’s of science degrees.
* Morehouse will provide transportation accommodations for students to physically get to Georgia Tech for courses while at Morehouse
* Georgia Tech will share opportunities with participating students while at Morehouse
* Both Morehouse and Georgia Tech will collaborate on outreach activities for pre-college students interested in the program.
* Both Morehouse and Georgia Tech will collaborate to monitor student progress and provide academic support

**Comparison between DDEP and CStoCMPE**

|  | **CStoCMPE** | **AUC DDEP** |
| --- | --- | --- |
| Requirement to take classes not applicable to CS or CMPE | None | Yes |
| Primary Focus on CHIPS and Science Act Workforce | Yes | No |
| High School Outreach Integration | Yes | No |
| Use of the ARCHE to take GT courses while at Morehouse | Yes | No |
| Senior leadership expertise in both CS and CMPE | Yes | No |
| Academic Partners with Morehouse | Georgia Tech | GT + 12 other schools |
| Advisement support for CS majors at Morehouse | Yes | No |
| Home department at Morehouse College | Computer Sci | Physics |

**Computer Engineering at Georgia Tech**

According to the latest US News and World Report Rankings, the Georgia Tech Computer Engineering Program ranks #5 overall and #2 among public institutions[[1]](#footnote-0). The bachelor's degree in computer engineering consists of the three computer engineering foundation threads (Distributed Systems & Software Design, Cybersecurity, Computing Hardware & Emerging Architectures); three Computer Science threads (Devices, Information Internetworks, Systems & Architecture); and three electrical engineering threads (Robotics & Autonomous Systems, Telecommunications, Signal & Information Processing).

**Funded Grants**

* Planning: HBCU-UP: OPEN: Planning the Use of Strategic Partnerships to Build Pipelines for CHIPS through Morehouse College ([NSF #2332411](https://www.nsf.gov/awardsearch/showAward?AWD_ID=2332411&HistoricalAwards=false))
* Collaborative Research: CISE-MSI: RCBP-ED: CCRI: TechHouse Partnership to Increase the Computer Engineering Research Expansion at Morehouse College ([NSF #2318703](https://www.nsf.gov/awardsearch/showAward?AWD_ID=2318703&HistoricalAwards=false))

**2022 CHIPS and Science Act**

The bipartisan CHIPS and Science Act is a U.S. federal statute signed into law by President Joe Biden on August 9, 2022. The act authorizes roughly $280 billion in new funding to boost domestic research and manufacturing of semiconductors in the United States, for which it appropriates $52.7 billion. Today's industry estimates show there will be a shortage of 300,000 engineers and 90,000 technical workers by 2030.

1. https://www.usnews.com/best-graduate-schools/top-engineering-schools/computer-engineering-rankings [↑](#footnote-ref-0)