- Collaborative Degree Programs
  CS+X
  X+CS
- Improving STEM Pipeline
  CS@Mines on Tour
  CS@Mines Activities
  DECTech

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CS@Mines
Why CS?
Computer Science Majors

• CS
• CS + Computer Engineering
• CS + Data Science
• CS + Robotics & Intelligent Sys

• CS + Business (proposed)
Computer Science Minors

- CS
- Computer Engineering
- Data Science
- Robotics & Intelligent Systems
X + CS
X + CS

Physics
CSCI 250

Geophysics
CSCI 250, CSCI 303

MechE
CSCI 102
DEPARTMENT OF COMPUTER SCIENCE

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CS@Mines
CS@Mines On Tour
Program Overview

**Goal:** share benefits of studying CS to 3rd-12th grade students and teachers.

**Implementation:**
team of 12 CS@Mines undergraduate students and one graduate student.
Program Overview

High School Classroom Visits:

- Address stereotypes in computer science
- Discuss career options in computing
- Share real undergraduate classroom experience and typical projects completed
- Engage high school students with an interactive presentation
Spring 2017
High School students reached: 776
High Schools reached: 11
Middle/Elementary School students reached: 1355
Middle/Elementary Schools reached: 18

Fall 2017
High School students reached: 682
High Schools reached: 12
Middle/Elementary School students reached: 1453
Middle/Elementary Schools reached: 15

4,266 students reached
100% of teachers said they would recommend CS@Mines On Tour to other teachers
CS@Mines

Activities
CS@Mines Activities

Scholarships for academically talented low-income students to study computer science at Mines (PATHS)

Student Experience
- What do you want to do? Funch or Fike
- 10 Truths and a Lie
- Puzzle Challenge (sponsored by Google)
- CS Research Honor’s Program
- etc.
STEM Diversity
DECTech
DISCOVER · EXPLORE · CREATE
Research indicates that introducing and fostering interest in STEM subjects by women role models through interactive activities is important to encourage girls in STEM.
DECTech Instructors

+ 15 DECTech Assistants (not shown)

are Mines majors in CS, MechE, Physics, Math, Civil, Geology, etc.
<table>
<thead>
<tr>
<th>Year</th>
<th>Fall Semesters</th>
<th>Spring Semesters</th>
</tr>
</thead>
<tbody>
<tr>
<td>2013</td>
<td>161 girls</td>
<td></td>
</tr>
<tr>
<td>2014</td>
<td>252 girls</td>
<td>202 girls</td>
</tr>
<tr>
<td>2015</td>
<td>260 girls</td>
<td>314 girls</td>
</tr>
<tr>
<td>2016</td>
<td>237 girls</td>
<td>337 girls</td>
</tr>
<tr>
<td>2017</td>
<td>265 girls</td>
<td>357 girls</td>
</tr>
</tbody>
</table>
DECTech Program Awards

MLK Award

Stand Up for STEM Award

Goldmine Award
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