CS Major UGrad Programs: Computer Science Department, College of Computing and Information, University at Albany. (General Education, residency, total credit, major/minor/overall GPA, BS/MA or honors requirements are not shown here.)

**Program Starting Points**

All these courses, 29 credits, are required for every CS Major (BA, BS–COMB, BS–MAT)

The BA also requires 12 additional credits in electives.

- **CSI201 (4 cr)** Intro. Comp. Sci F,Spr,Sum
- **CSI310 (3 cr)** Data Structures Spr,Sum
- **CSI333 (4 cr)** Prog. @ HW/SW Interface (C & Assembly L) Fall Only
- **CSI404 (3 cr)** Comp. Organization Spring Only
- **CSI210 (4 cr)** Discrete Structures F,Sum
- **MAT113 or 119 (4 cr)** Calculus II F, Spr, Sum
- **MAT120 (3 cr)** Linear Algebra F, Spr, Sum
- **CSI311 (3 cr)** Prin. Prog. Lang. Spring Only
- **CSI405 (3 cr)** OOP Prin. Pract. TBA
- **CSI402 (3 cr)** Systems Programming Spring Only
- **CSI403 (3 cr)** Algorithms Spring Only
- **CSI409 (3 cr)** Automata/Formal Languages—Fall Only
- **CSI418 (3 cr)** Software Eng. TBA
- **CSI401 (3 cr)** Numerical Methods TBA
- **MAT214 (3 cr)** Calc. Several Variables
- **MAT214 or MAT300 or above (3 cr)** Math Elective
- **MAT300+ (3 cr)** Math Elective
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**Elective choices for the remaining 12 cr of the BA major only. See below for the BS major requirements and options. The BA also requires a non–overlapping minor or a 2nd major.**

- **MAT112 or 118 (4 cr)** Calculus I F, Spr, Sum
- **MAT101+MAT111**
- **MAT101+MAT112**
- **MAT113 or 119 (4 cr)** Calculus II F, Spr, Sum
- **MAT367 (Z) (3 cr)** Discrete Probability F, Spr, Sum
- **MAT300+ (3 cr)** Math Elective
- **MAT300+ (3 cr)** Math Elective
- **MAT300+ (3 cr)** Math Elective
- **MAT300+ (3 cr)** Math Elective

**REQUIRED for both BS majors. 15 credits. (402 & 311 are elective ONLY for BA)**

- **MAT220 (3 cr)** Linear Algebra F, Spr, Sum
- **CSI311 (3 cr)** Prin. Prog. Lang. Spring Only
- **CSI300Z (3 cr)** Social Impl. of Computing Spr, Sum
- **CSI300Z (3 cr)** Social Impl. of Computing Spr, Sum
- **CSI400–470,500–550 (3 cr)** CS Elective 1*
- **CSI400–470,500–550 (3 cr)** CS Elective 2*
- **CSI400–470, MAT300+ (3 cr)** CS or Math Elective 1*
- **CSI400–470, MAT300+ (3 cr)** CS or Math Elective 1*
- **CSI400–470, MAT300+ (3 cr)** CS or Math Elective 1*
- **CSI400–470, MAT300+ (3 cr)** CS or Math Elective 1*

**REQUIRED and electives for the BS–COMBINED major (31 cr).**

- **PHY140 or 141 (4 cr)** Physics I F, Spr, Sum
- **PHY145 (1 cr)** Physics I Lab
- **PHY150 or 151 (1 cr)** Physics II Spr, Sum
- **PHY1550 (1 cr)** Physics II Lab
- **Major Sci. or Engineering 3 cr non–CS/MAT elective 1**
- **Major Sci. or Engineering 3 cr non–CS/MAT elective 2**

**REQUIRED and electives for the BS–MATH major (21 cr).**

- **MAT214 (3 cr)** Calc. Several Variables
- **MAT300+ (3 cr)** Math Elective
- **MAT300+ (3 cr)** Math Elective
- **MAT300+ (3 cr)** Math Elective
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- **MAT300+ (3 cr)** Math Elective

**NOTE:**

Electives usually have prerequisites not shown here.

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