

## AP Computer Science Summer Work 2025

### Overview:

To be eligible for enrollment in either AP Computer Science Principles (CSP) or AP Computer Science A (CSA) for the 2025–26 school year, students must complete a summer work packet. This requirement is designed to ensure that enrolled students have a genuine interest in programming and are prepared for the rigor of these college-level courses.

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## AP Computer Science Principles (CSP)

**Curriculum:** UTeach CS Principles 2025–26

### Goals:

- Gauge problem-solving mindset
- Assess interest in computing
- Introduce foundational computing concepts

### Summer Work Packet:

1. **Exploration Essay (1 page):**
  - Prompt: *Why are you interested in computer science? Describe a time you solved a problem creatively or used technology in a new way.*
2. **Scratch Programming Challenge:**
  - Create a **Scratch project** that includes:
    1. At least **3 sprites**
    2. **2 different scenes**
    3. **User interaction** (keyboard or mouse input)
  - You may remix an existing project or start your own, but be sure to add your own unique features and code.
3. **Digital Citizenship Task:**
  - Read an article about **data privacy, AI bias, or internet safety**
  - Respond to the following:
    1. What is one new thing you learned?
    2. Why is this topic important?
    3. How might it apply to your life or future career?

### Submission Instructions:

- Submit a Google Doc or PDF with all components via email
- Include a link to your Scratch project and be sure it is set to public
- **Deadline:** July 15, 2025

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## AP Computer Science A (CSA)

Curriculum: UTeach CS A 2025–26

### Goals:

- Assess Java readiness
- Evaluate programming curiosity and perseverance
- Practice basic syntax and problem-solving

### Summer Work Packet:

#### 1. Java Basics Practice:

- Complete 5 coding challenges using any Java IDE of your choice
- If you don't already have one, here are three free options:
  - [Replit](#)
  - [BlueJ](#)
  - [IntelliJ IDEA Community Edition](#)
- Focus: variables, conditionals, loops, and object-oriented basics
- Sample Challenge: *Write a program that calculates pay based on hours worked and hourly rate, including overtime.*

#### 2. Reflection Questions (1 paragraph each):

- What was hardest about the Java tasks?
- Why do you want to take AP CSA?
- What strategies did you use when stuck?

#### 3. Bonus (Optional, Encouraged):

- Create your own Java program using a loop and conditional (e.g., dice roller, quiz, or tip calculator)

#### 4. Submission Instructions:

- Share your project files or upload to Replit, GitHub, or Google Drive with a shareable link
- Include typed responses in a Google Doc or PDF
- **Deadline:** July 15, 2025

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### Questions?

Email your instructor before July 1 if you need clarification or help accessing any tools.

Be creative, be curious, and show your interest—this summer work helps us build a strong and motivated computer science cohort!