# EMPOWERING MINNESOTA: STATE STRATEGIC PLAN FOR COMPUTER SCIENCE

The Computer Science State Strategic Plan outlines a transformative vision to expand access to computer science education in every K–12 school district and charter school in Minnesota, in alignment with Sec. 120B.241 MN Statutes. By fostering equitable and sustainable growth, the plan aims to equip all students with the critical thinking, problem-solving, and technical skills they need to thrive in the digital age.



Check out the full plan here.

VISION

By 2030, every Minnesota student will have access to high-quality computer science education, preparing them to innovate and excel in a global workforce.

- Expand equitable access to computer science education across all school districts.
- Develop and implement comprehensive computer science pathways from K–12.
- Establish diverse pathways for teacher qualification in computer science.
- Foster partnerships between education sectors and the computer science industry.



### 10 RECOMMENDATIONS

- 1. Computer Science Advisory Committee
- 2. Teacher Qualifications & Licensure
- 3. Grants and Funding
- 4. K-12 Computer Science Pathway
- 5. Continuous Improvement
- 6. Awareness Building
- 7. Local Education Agency (LEA) CS Education Plans
- 8. Outside Funding
- 9. Regional Communities of Learning and CS Specialists
- 10. Graduation Requirements Review Committee



# PLAN FOR COMPUTER SCIENCE

## PLAN HIGHLIGHTS

#### • Equitable Access Vision:

• Within five years, every Minnesota K–12 school is to offer computer science learning, emphasizing equitable access to nurture computational thinking and innovation skills.

#### Strategic Implementation and Advisory:

• The establishment of a Computer Science Advisory Committee is crucial for guiding the strategic implementation of the plan and ensuring continuous alignment with state goals.

#### • <u>Teacher Licensure and Training:</u>

• New specific computer science teaching licenses and multiple, flexible qualification routes are proposed to rapidly increase the pool of qualified computer science educators.

#### Funding and Resources:

• Grant programs will be developed to support districts in rolling out computer science education, focusing on technological infrastructure, professional development, and accessible curriculum.

#### • Emphasis on Diversity and Inclusion:

• Bridging gaps in access, participation, and experience for students from historically marginalized backgrounds is a priority, requiring culturally responsive teaching and inclusive curriculum designs.

#### • <u>Professional Development for Educators:</u>

• The plan includes significant support for teacher and district leader professional development in computer science, aiming to build capacity and expertise across the state.

#### • Collaborative Effort and Community Engagement:

• Engagement with industry, community organizations, and higher education institutions is encouraged to foster a supportive ecosystem for computer science education, aligning with broader workforce and societal needs.