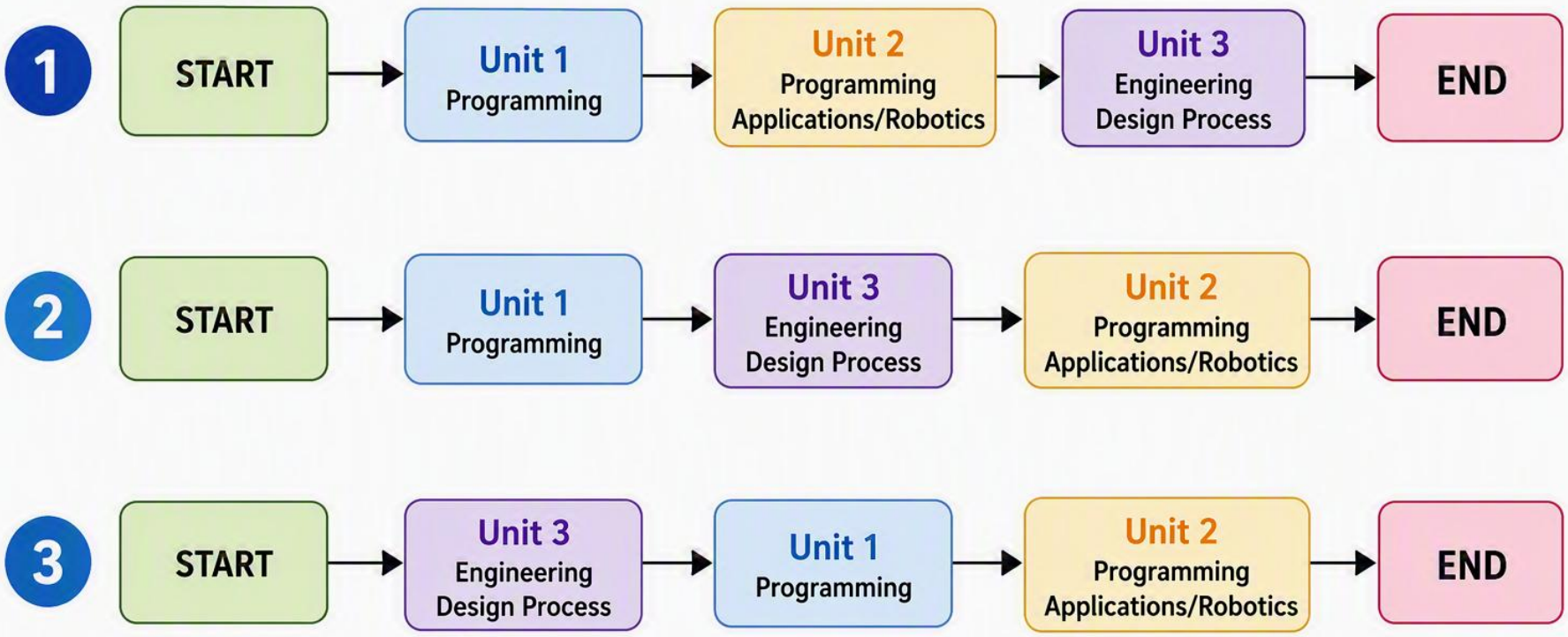
2026-2027 Kindergarten STEAM Scope and Sequence

Unit (Title)	Duration	Essential Questions	Key Learning Outcomes	Standards
Unit 1 *Coding/Programming Basics*	15-20 Days	- What is programming? - How is code a language? - How do we give directions using steps? - What do coding blocks do? - Who uses programming? -How does technology help people every day? -Why does the order of steps matter?	- Explain that programming gives instructions - Describe code as communication - Use sequencing to complete simple tasks - Identify basic coding blocks (start, motion, events) - Create simple programs with a purpose	**CSTA 2026** **Algorithms & Design** - EK-ALG-01 - EK-ALG-03 **Programming** - EK-PRO-04 - EK-PRO-05 **Systems & Security** - EK-SAS-11 **PA STEELS (Engineering & Technology)** - 3.5.K.A - 3.5.K.B - 3.5.K.C
Unit 2 *Coding/Programming Application*	15-20 Days	- How do designers solve problems? -Why do we plan before creating? -How do we improve our ideas? -Why do programmers debug? -How do we know if something works? -How can technology help people? -How can working together improve our designs?	- Identify errors in a sequence - Debug simple programs - Modify programs without starting over - Create an interactive story or game - Explain how programs work	**CSTA 2026** **Programming** - EK-PRO-04 - EK-PRO-05 - EK-PRO-06 **Algorithms & Design** - EK-ALG-01 **Computing & Society** - EK-CAS-15 **PA STEELS (Engineering &**

Unit (Title)	Duration	Essential Questions	Key Learning Outcomes	Standards
				Technology) - 3.5.K.A - 3.5.K.B - 3.5.K.D **CEW Standards** -13.1.3.B -13.1.3.H -13.2.3.A -13.3.3.C
Unit 3 Engineering Design Process	15-20 Days	- What is a problem and solution? - Why do we plan before building? - How do we improve designs? - Why is feedback important? - How do we share ideas? - How can engineering make our community better?	- Define problems and solutions - Generate multiple ideas - Create drawings or blueprints - Build and test prototypes - Improve designs using feedback - Share solutions with others	**PA STEELS (Engineering & Technology)** - 3.5.K.A - 3.5.K.B - 3.5.K.C - 3.5.K.D
Primary Learning Resources: **Code.org, Course A (2025)** **Scratch Jr** **BeeBots** **Puzzlets** **Discovery Education** **STEAM Design Challenge Catalog** **LEGO STEAM Park** **Rosie Revere Engineer by Andrea Beaty** **Iggy Peck Architect by Andrea Beaty**				

VALID TEACHING ORDER PATHS

(Unit 2 can never come before Unit 1)



In every path, Unit 1 (Programming) always comes before Unit 2 (Programming Applications/Robotics).