## CS4RI: Elementary Level

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| K-2        | Creative Computing with Scratch Jr.  | Copernicus STEAM Learning Lab| 6 units integrated into existing curriculum in which students use a drag and drop programming language to code, create, and share interactive stories, animations, games, music, and more as they learn problem solving and other fundamental CS concepts. | Teacher Profile: No prior CS experience required  
PD Profile: 2 half-days and 1 full-day in-person PD (12+ hours), plus school year support  
Cost to School: PD costs waived for eligible educators, $375 per participant for additional PD  
Computer Access: Access for all students (primarily tablets and Chromebooks) |
| 3-5        | Creative Computing with Scratch      | Copernicus STEAM Learning Lab| 6 units integrated into existing curriculum in which students use a drag and drop programming language to code, create, and share interactive stories, animations, games, music, and more as they learn problem solving and other fundamental CS concepts. | Teacher Profile: No prior CS experience required  
PD Profile: 4 full-days and school-year follow-up Meetups (28+ hours), school year support  
Cost to School: PD costs waived for eligible educators $600 per participant for additional PD  
Computer Access: Access for all students (Tablet accessibility coming soon) |
| K-5        | CS Fundamentals                      | Code.org                     | 6 courses, 20 1-hr lessons integrated across K-5 curriculum in which students learn CS fundamentals by creating computer games                                                                                       | Teacher Profile: No prior CS experience required  
PD Plan: 1-day in-person PD and school year support  
Cost to School: PD/Curriculum costs waived  
Computer Access: Occasional student access |
| K-5        | Launch                               | Project Lead the Way         | 8 modules – 80 hours of content integrated across grades K-5. PLTW’s entire K-12 CS experience involves interdisciplinary learning; exposing students not only to computer science, but to various disciplines and subjects, helping them understand how computer science relates to the world around them. | Teacher Profile: No prior CS experience required  
PD Profile: 3-day training for Launch Lead Teacher; once trained, the Launch Lead Teacher can then train whole building without further investment  
Cost to School: $750 per school Annual Participation Fee $750 per teacher  
Computer Access: Access for all students |
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| 6-8        | Creative Computing with Scratch | Copernicus STEAM Learning Lab | 6 units integrated into existing curriculum in which students use a drag and drop programming language to code, create, and share interactive stories, animations, games, music, and more as they learn problem solving and other fundamental CS concepts. | Teacher Profile: No prior CS experience required  
PD Profile: 4 full-days and school-year follow-up Meetups (28+ hours), school year support  
Cost to School: PD costs waived for eligible educators $600 per participant for additional PD  
Computer Access: Access for all students |
| 6-8        | CS Discoveries                  | Code.org URI Regional Partner | One year-long course OR six modules distributed in courses in 6-8th grade. Based on code.org course. Modules include Problem Solving, Internet, Programming, Design, Data, Physical Computing. | Teacher Profile: No prior CS experience required  
PD Profile: 5-day TeacherCon and four 1-day follow-up workshops during the school year; school year support  
Cost to School: No cost for PD. $10/student for physical computing device.  
Computer Access: Access for all students |
| 6-8        | CS Through Game Creation        | GameSalad                | 9 week or 1 semester course in which students apply CS concepts by building original professional-grade mobile games.                                                                                           | Teacher Profile: No prior CS experience required  
PD Profile: Online training or 1-day in person PD and school year support  
Cost to School: $27/student for license and curriculum (with tiered discounts) PD program costs waived for one teacher $950 for additional teacher PD  
Computer Access: Access for all students |
| 6-8        | Gateway                          | Project Lead the Way     | 3 units integrated across grades 6-8; each unit is 45 minutes/45 days of instruction; each unit fits a quarter or semester rotation schedule. PLTW’s entire K-12 CS experience involves interdisciplinary learning, exposing students not only to computer science, but to various disciplines and subjects, helping them understand how computer science relates to the world around them. Follow up to PLTW’s Launch program. | Teacher Profile: No prior CS experience required  
PD Profile: 5-day in-person training per unit and ongoing training opportunities  
Cost to School: $750 per school Annual Participation Fee; $950 per teacher per unit implemented  
Computer Access: Access for all students |
| 7-12       | Bootstrap: Algebra              | Bootstrap                | 20 hour module in existing algebra course in which students learn the fundamentals of Computer Science using a unique, algebraic programming language to build a video game of their own design. This allows students to blend their understanding of programming and mathematics, enhancing both disciplines. | Teacher Profile: No prior CS experience required  
PD Profile: 3-day in-person PD and school year support  
Cost to School: PD/Curriculum costs waived for one teacher; $1000/teacher for additional PD  
Free PD Opportunities Available  
Computer Access: Occasional student access |
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| 7-12       | Bootstrap: Data Science          | Bootstrap        | 20 hour module in existing course. Bootstrap: Data Science teaches students to view programs as questions we ask of data. Students form their own questions about the world around them, and learn to analyze data critically and carefully to find answers to their own compelling problems. | Teacher Profile: No prior CS experience required  
PD Profile: 3-day in-person PD with optional 4th day and school year support  
Cost to School: PD/Curriculum costs waived for one teacher; $1000/teacher for additional PD  
Computer Access: Occasional student access |
| 9-12       | Intro to Computing and Data Science | URI             | 1 semester course. Computational thinking skills including an introduction to programming | Teacher Profile: No prior CS experience required  
PD Profile: 5-day Summer workshop and four 1-day follow-up workshops during the school year; school year support  
Cost to School: No cost for PD  
Computer Access: Access for all students, no installed software, all platforms.  
Concurrent Enrollment: Allowed |
| 9-12       | AP CS Principles                 | Code.org        | 2 semester course. College-level introduction to computational thinking and programming following College Board AP CS Standards. Follow up to URI’s Intro to Computing program | Teacher Profile: No prior CS experience required  
PD Profile: 5-day TeacherCon and four 1-day follow-up workshops during the school year; school year support  
Cost to School: PD/Curriculum costs waived; $92/student for AP exams  
Computer Access: Access for all students  
Concurrent Enrollment: Allowed |
| 9-12       | Intro to Programming             | Microsoft TEALS | 1 semester course co-taught with industry partners. Based on UC Berkeley’s CS10, students learn college-level CS fundamentals using the Snap! Block-based language. | Teacher Profile: No prior CS experience required  
PD Profile: Summer online course, industry mentor partnership, school year support  
Cost to School: PD/curriculum costs waived  
Computer Access: Access for all students |
| 10-12      | AP CS A                          | Microsoft TEALS | 2 semester course co-taught with industry partners. Based on University of Washington’s CSE142/143, students learn college-level programming using Java following College Board’s AP CS-A standards. Follow up to Microsoft TEALS Intro to CS program. | Teacher Profile: Any prior AP teaching experience useful  
PD Profile: Summer online course, industry mentor partnership, school year support  
Cost to School: PD costs waived 130/student for textbooks $92/student for AP exams  
Computer Access: Access for all students |