



SMART Act Presentation

SB18-086 Cyber Coding Cryptology For State Records

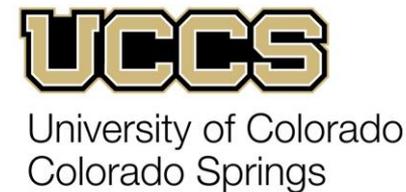
*Joint Business Committee
Presentation*



COLORADO STATE UNIVERSITY
SYSTEM
Colorado State University • Colorado State University - Pueblo • CSU - Global Campus



January 27, 2021





University of Colorado
Colorado Springs

University of Colorado Colorado Springs

- In partnership with the NCC and Space ISAC, UCCS has consistently exceeded legislation 15% scholarship requirements
- Over 700 UCCS undergraduate and graduate students with cybersecurity degrees are working in industry
- UCCS is expanding cybersecurity degrees – in Engineering, Business and Letters, Arts and Science
- UCCS cybersecurity faculty has doubled, leveraging state funds to obtain over \$15M in additional cybersecurity funds
- UCCS and NCC have doubled 2018 state investment (\$3.9M) and quintupled 2019 (\$15M)
- \$6M 4-year Department of Labor Cybersecurity grant for 5,000 apprentices
- \$3M 3-year National Security Agency Cybersecurity Faculty Development grant
- UCCS leads the Mountain West Cybersecurity Consortium (MWCC), over 40 post-secondary institutions cybersecurity.
- UCCS is developing a long-term strategic plan to maintain and expand cybersecurity programs and to become self-sufficient, but for the next three years - the state's investment is critical along the path toward sustainability



Pikes Peak Community College

PPCC spent the full \$300,000 allocation.

Spending (in major categories) is as follows:

- Scholarships – \$30,000 – Awarded 24 \$1,250.00 scholarships. The legislation required us to spend 10% of our total allocation on scholarships. Met our obligation.
- Faculty Cost – \$46,000 – April Frost, Cyber Instructor, was hired in January 2019. Expense represents 6 months (January thru June).
- Travel – \$14,000 – Travel and training cost for cyber faculty and students in the cyber club.
- Operating – \$210,000 – Operating expenses for infrastructure investments to Room E204 at Rampart. Expenses include costs for audio visual equipment and networking nodes and related software. Also included a small amount for administrative cost in administering the funds.



Colorado Mesa University

- Cybersecurity minor has been approved and is now available to students in both computer science and business
- On the last step of becoming an NSA-Center of Academic Excellence
- Will offer our first GenCyber High School camp in the summer of 2021
- Searching for a new faculty member currently.
- One of our Cybersecurity students graduated with a job waiting for them at Lockheed in cybersecurity.
- Students competed for the first time in the Rocky Mountain College Cyber Defense Competition



METROPOLITAN
STATE UNIVERSITYSM
OF DENVER

Metropolitan State University of Denver

- Interdisciplinary cybersecurity degrees and Master's certificates integrate Computer Science, Computer Information Systems and Business Analytics, and Criminal Justice and Criminology.
- 214 students currently enrolled in the B.S. Cybersecurity major, significant growth from the 47 enrolled when the major launched in Fall 2018
- Hired Director of The Cyber Range, a cybersecurity training ground for students and industry professionals
- Awarded \$50,000 in scholarships in Fall 2020 and \$30,000 awarded in the 2019-20 school year, supporting a total of 60 students to-date
- Student success: 13 student educators earned graduate certificates in Cybersecurity; 100% will be teaching cybersecurity to K-12 students in local public school districts this year
- \$25,000 in matching scholarship funds have been secured from industry partners and additional funds are on tracked to be raised for The Cyber Range



Western Colorado University

- Western is in the third year of offering a computer science major with an information security emphasis. This program is distinctive in Colorado as a technically focused cyber security bachelor's degree.
- 26 students in the program served by use of funds for 0.9 FTE faculty
- Already has become the largest emphasis in Western's fastest growing major
- 5 graduates, though a complete 4-year cohort has not yet developed
- Western faculty pursuing NSA CAE-CDE designation for Information Security
- Western will host an NSA/NSF sponsored GenCyber camp for middle-schoolers
- 4 student scholarships totaling \$23,000
 - 1 is for Dr. Marc Rubin (Ph.D. in Computer Science from Colorado Schools of Mines) to achieve a Master of Science Degree in Cyber Security from Georgia Tech in order to make our cyber program sustainable
- Western cancelled its Computer/Cyber camps and campus presentations due to COVID. Both are planned to resume beginning summer 2021.



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Colorado State University System

- More than forty (40) IT Security faculty hired/supported by the grant to date
- Student enrollments in IT Security Courses in FY 19, FY 20, and FY 21 (to date) = 28, 303, and 471, respectively
- Number of internships in IT Security in FY 19, FY 20, and FY 21 (to date) = 71, 129, and 118, respectively
- 436 students who have participated in the courses/internships have graduated to date, virtually all in IT fields
- No IT security courses were cancelled in FY 21, despite reduced funding
- \$9.9 million in matching funds raised to date
- Exceeding objectives of the legislation, in proportion to reduced funding, in FY 21



Final Request



We look forward to working with you to reauthorize the funding in the 2021 state legislative session.

