



THE INFORMATION TECHNOLOGY PATHWAY

ROOTING LCCC AS THE CORNERSTONE OF IT TRAINING IN WYOMING TO
SUPPORT ECONOMIC DIVERSIFICATION AND INVESTMENT

WHY INFORMATION TECHNOLOGY AS A PATHWAY? WHY LCCC?

One of the largest growth sectors in employment within Wyoming and nationally.

Stable career opportunities, with diverse promotion potential.

Varied fields of study and focus.

Challenges in alignment to STEM or Trades and Technical Studies without diminishing the value of the IT degree.

Laramie County as a growing technology hub.

Pre-COVID enrollment trends

Occupation Data, 2020Q3

		Information Technology (CTE Cluster) (95-0150)							Computer and Information Analysts (15-1210)						
Region	Employment Type	Total 5 Year Forecast Demand	5 Year Growth Demand	Total 10 Year Forecast Demand	10 Year Growth Demand	Ann 10th %ile Wage ¹	Ann 25th %ile Wage ¹	Ann 50th %ile Wage ¹	Total 5 Year Forecast Demand	5 Year Growth Demand	Total 10 Year Forecast Demand	10 Year Growth Demand	Ann 10th %ile Wage ¹	Ann 25th %ile Wage ¹	Ann 50th %ile Wage ¹
Researched LCCC Market Region	Total Employment	13,641	2,475	27,600	5,221	\$47,300	\$65,200	\$88,400	1,575	291	3,190	615	\$61,600	\$74,200	\$90,400
Wyoming (+75 mile radius)	Total Employment	46,147	9,969	93,819	21,268	\$41,000	\$58,000	\$81,300	4,767	1,034	9,692	2,205	\$50,900	\$64,500	\$82,000
USA	Total Employment	2,038,105	298,051	4,101,691	616,014	\$44,500	\$62,800	\$88,300	326,117	47,721	656,211	98,545	\$55,500	\$70,900	\$92,500

Source: JobsEQ®

Note: Figures may not sum due to rounding.

Employment data as of 2020Q3. Demand data reflect place-of-work employment; retirements reflect place-of-residence data. Employment and unemployment data represent a four-quarter moving average.

1. Wage data are as of 2019 and represent the average for all Covered Employment.

Strategic Competencies & Skills

Competencies > Skills

Business: Product Management
 Business: Advertising/Marketing
 IT/Math: UI/UX
 IT/Math: Cyber Security
 IT/Math: Information Security
 IT/Math

 IT/Math: Software/Programming

 IT/Math: Support
 IT/Math: Cloud Computing

 Computer Literacy

 IT/Math: Data Warehousing/Management

 IT/Math: Network Admin

 IT/Math: Computer Hardware
 IT/Math: AI/Machine Learning
 IT/Math: Data Science/Analytics

 Unknown/Other
 General

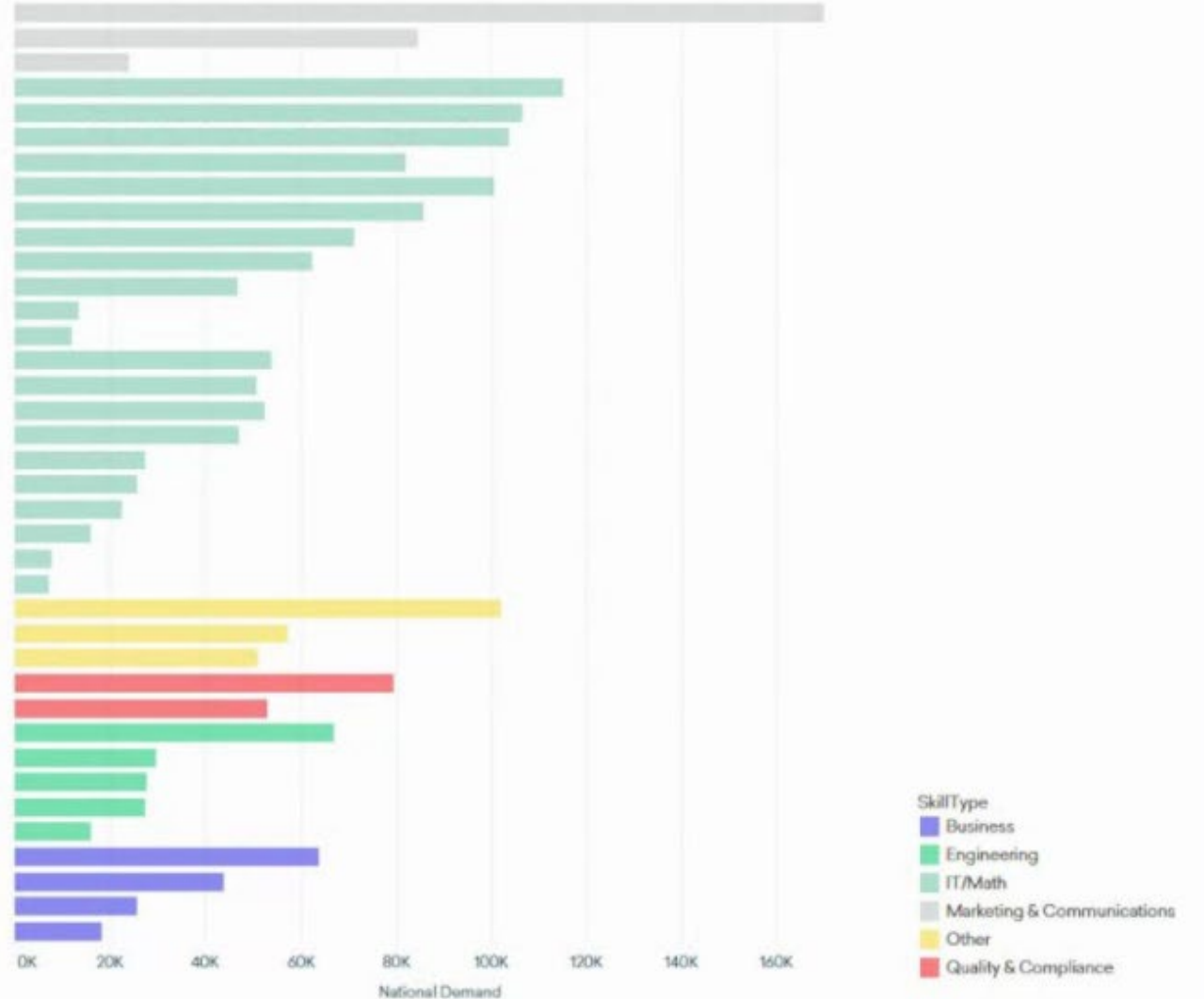
 Quality/Compliance

 Product Design/Development

 Electrical/Electronics

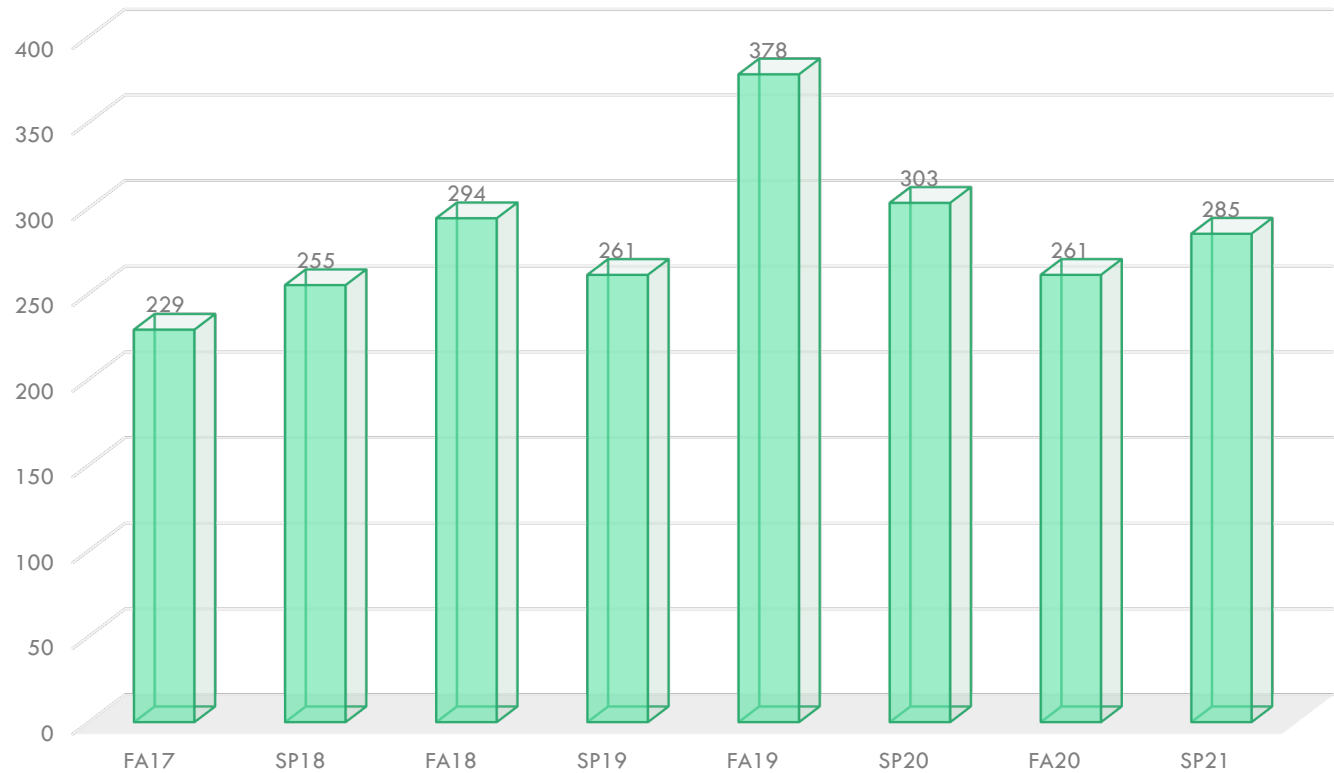
 Engineering: Industrial/Mechanical
 Business: Business Planning/Continuity
 Business: Leadership
 Business: Project Management
 Business: Lean/Process Improvement

Product Management
 Product Marketing
 User Experience
 Cyber Security
 Certified Information Systems Security Professional
 Automation
 Linux
 Java (Programming Language)
 DevOps
 Technical Support
 Docker
 Apache Hadoop
 Cloud Infrastructure
 Cloud Computing
 Apple iOS
 Android (Operating System)
 SQL (Programming Language)
 Big Data
 Authorization (Computing)
 Configuration Management
 Systems Engineering
 Machine Learning
 Data Science
 R (Programming Language)
 Vulnerability
 Electronics
 Security Controls
 Auditing
 Security Policies
 New Product Development
 Prototyping
 Printed Circuit Board
 Security Systems
 Process Manufacturing
 Risk Analysis
 Technology Roadmap
 Scrum (Software Development)
 Business Process

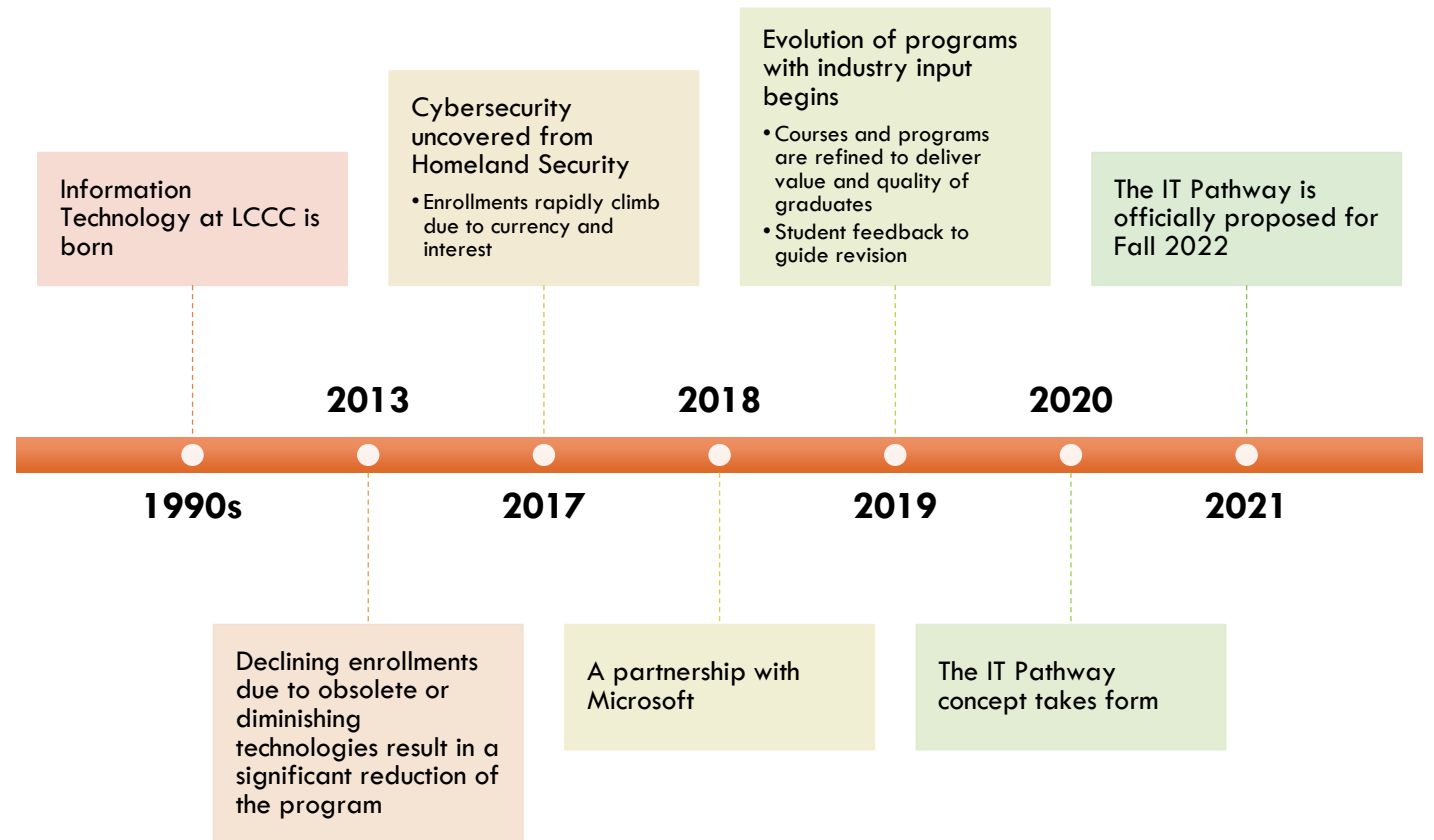


EVEN WITH
COVID, I.T.
REMAINS
STABLE

Historical Duplicated Student Count



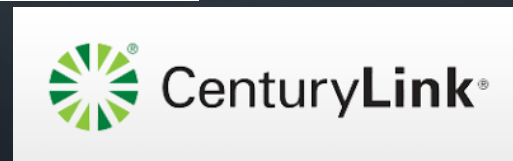
HISTORY OF INFORMATION TECHNOLOGY AT LCCC



DESIGNED WITH INDUSTRY GUIDANCE

- Industry Partners –

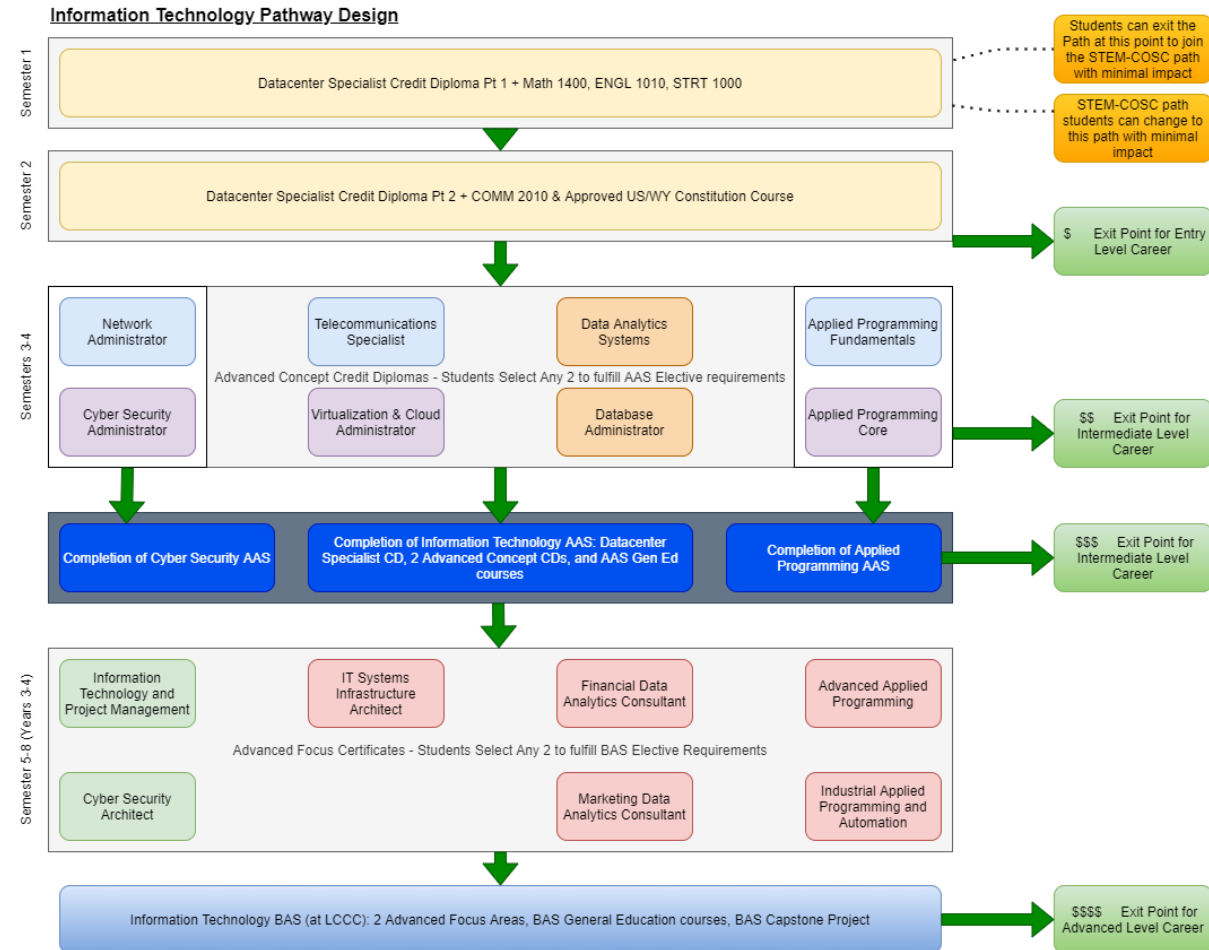
- Microsoft
- Lunavi
- State of Wyoming
- Blue FCU
- Meridian Trust FCU
- Magpul
- Echostar
- Dynamics Strategy
- Holly Frontier
- CenturyLink
- Visionary Broadband
- Union Wireless



INDUSTRY COMMENTS

- “Offerings in VMWare, Hyper-V, Citrix and cloud services are a no brainer.”
 - Andrew Shaw – Vice President of Information Technology, Meridian Trust FCU
- “Magpul has a small IT presence in Cheyenne, mostly due to the availability of talent,”
 - Carey Ryerson – Vice President of Manufacturing Operations, Magpul Industries
- “There are not enough resources to do the work. Organizations want to move forward with digital transformation and can’t because there isn’t a workforce to support it.”
 - Lindsey Garcia – CEO, Dynamics Strategy
- “The ability to find, employ, and retain qualified technicians in Wyoming is the number one factor limiting broadband expansion.”
 - Brian Worthen – CEO, Visionary Broadband
- “We’ve looked nationwide and can’t find programs that are driven towards business data analytics application. Everything is theory and no ability to use the systems.”
 - Carey Ryerson – Vice President of Manufacturing Operations, Magpul Industries

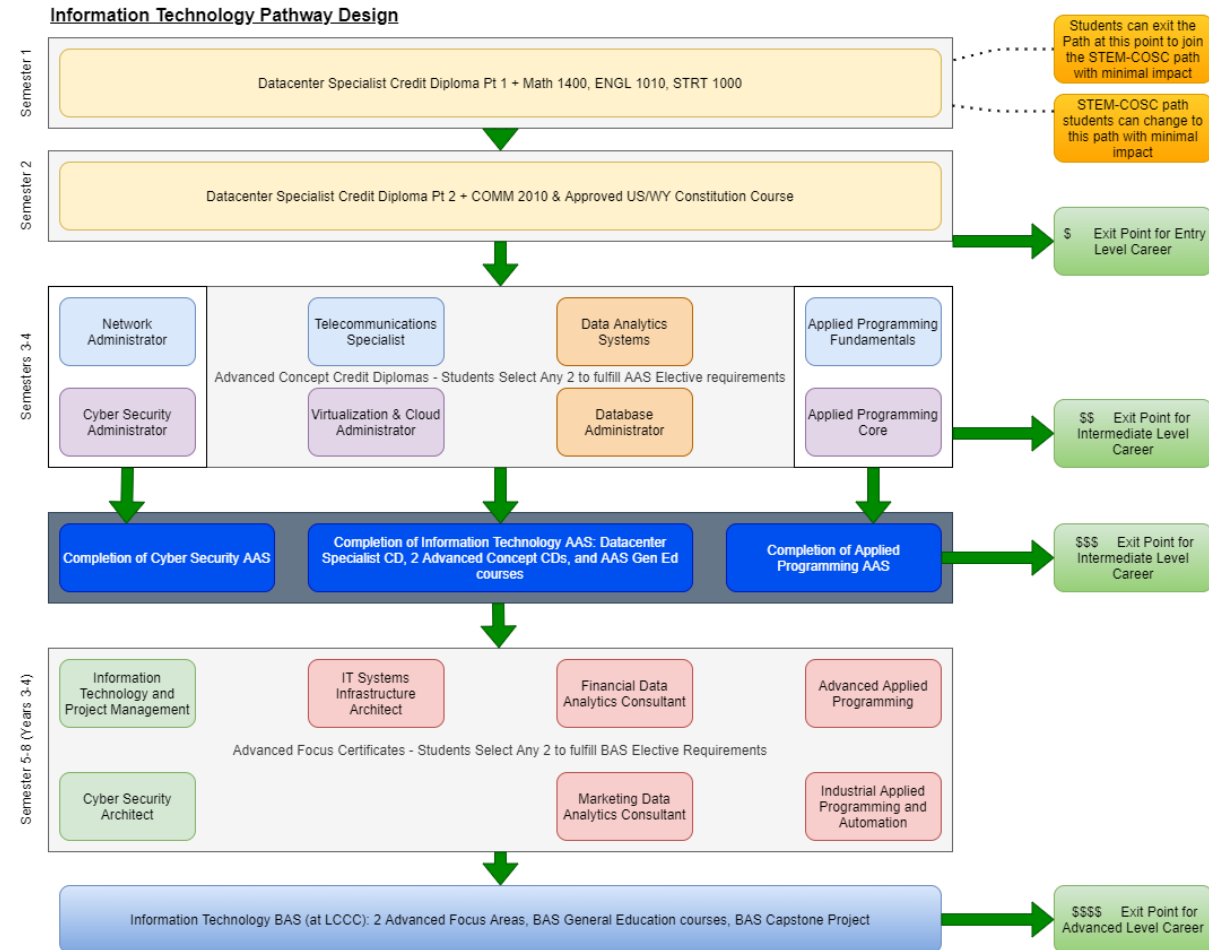
A NEW PATH



Students can exit the Path at this point to join the STEM-COSC path with minimal impact

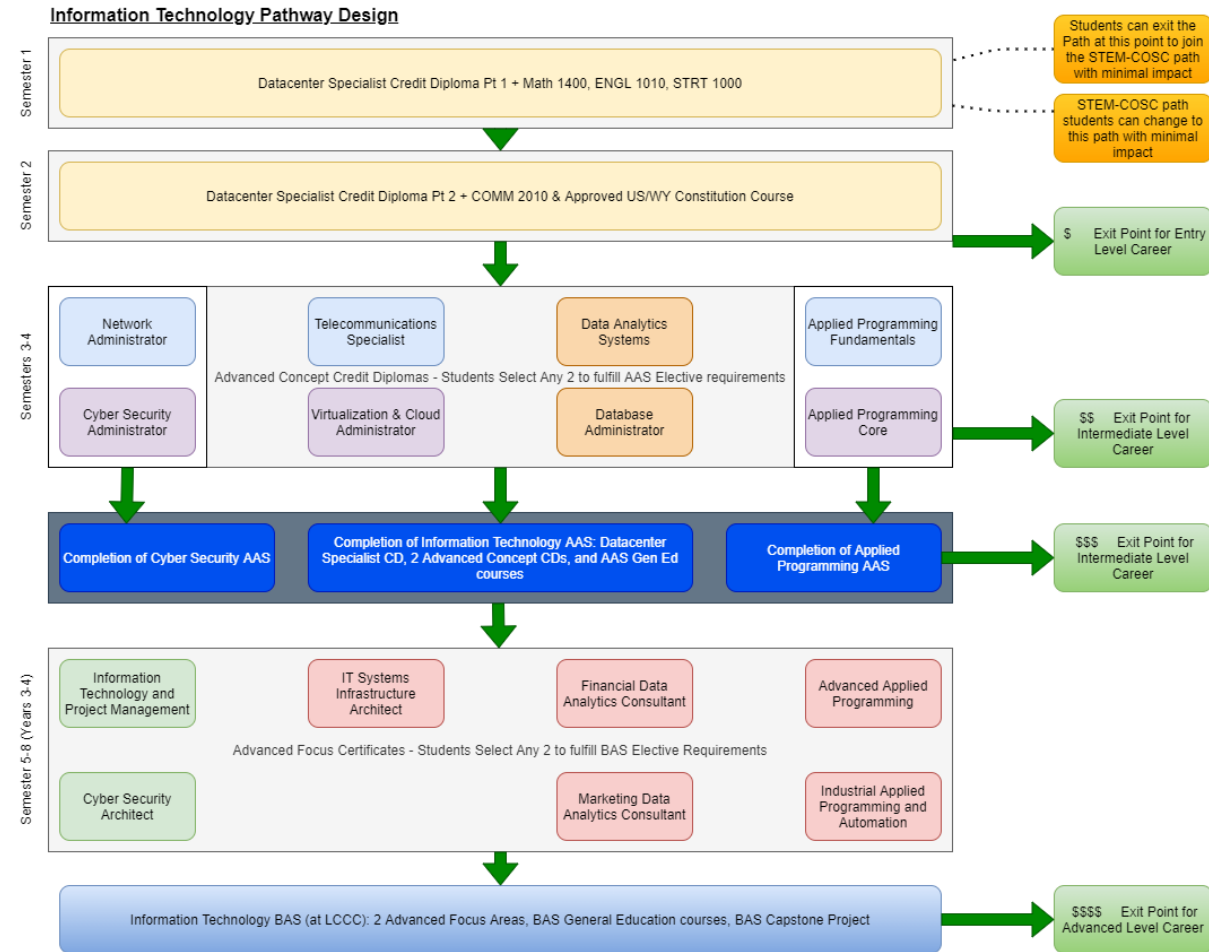
STEM-COSC path students can change to this path with minimal impact

- Modifications to the following programs:
 - CIS AAS
 - Cybersecurity AAS
 - Network Administrator CD
 - Datacenter Technician CD
 - Cybersecurity Administrator CD
- New Programs
 - Applied Data Analytics AAS
 - Database Administration AAS
 - Applied Programming AAS
 - Data Analytics Systems CD
 - Database Administrator CD
 - Applied Programming Fundamentals CD
 - Applied Programming Core CD
 - Virtualization and Cloud Administrator CD
 - Telecommunications Specialist CD



SETTING A FOUNDATION FOR THE FUTURE

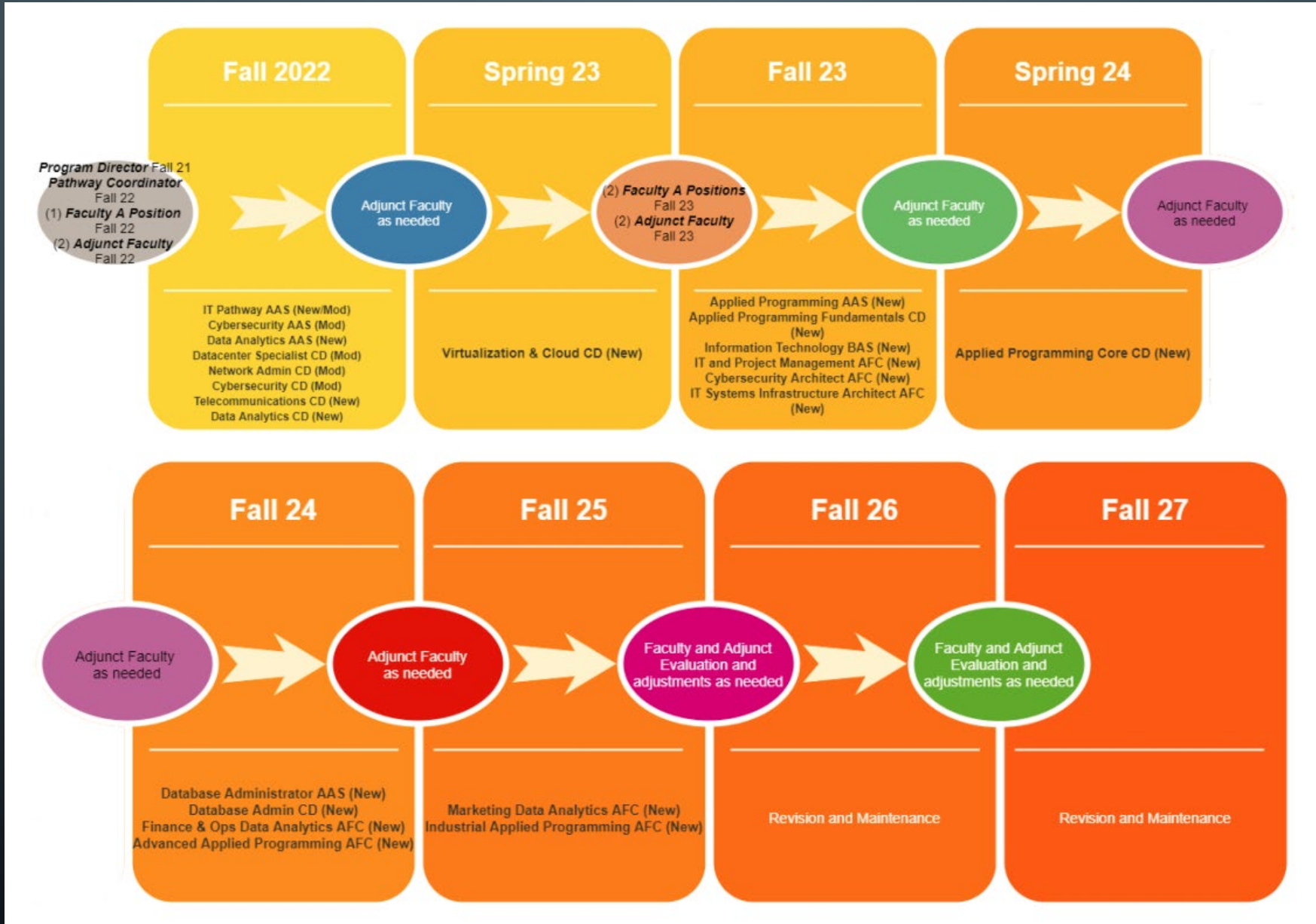
- Student options for a Bachelor-level degree in Information Technology in Wyoming are online, and out-of-state only.
 - CSU Global
 - Western Governors University
 - Clark College
- This Pathway includes a design and potential for a new BAS program, to continue student development and opportunity within Wyoming.



ADAPTING TO CHANGE WITH FLEXIBLE DESIGN

- Each milestone is marked with the completion of Credit Diplomas, which allow the student to enter the workforce, and complete their degree with the financial support of their employer.
- Credit Diplomas can be added or retired as technologies and needs shift.
- Graduates can return to broaden skillsets and deepen resumes with additional CDs.
- BAS design follows a similar format with more advanced skills and concepts.

BUILT FOR SPEED... OR PATIENCE



LIGHT IN THE DARKNESS

Technology Growth in Cheyenne

Job opportunities along the Front Range

Ability to be first to market

Innovative Programs and Rapid Response to industry needs

Federal Funding Leveraged:

- Perkins
- CARES

Federal Funding opportunities:

- Perkins
- NSF
- American Rescue Plan

UNIQUELY US

- SuperFlex Course delivery
 - Hybrid in-person
 - Online Synchronous
 - Online Asynchronous
- With these changes, we feel that we can deliver an innovative, inspired and robust learning experience to all of our students, removing obstacles to higher education and transforming lives.
- It is time for us to stop forcing students to make their lives work for their education, and make their education work for their lives.

The slide features a dark blue background with white decorative circuit-like lines in the corners. These lines consist of straight segments connected by small circles, resembling a printed circuit board layout. The lines are positioned in the top-left, top-right, bottom-left, and bottom-right corners, framing the central text.

QUESTIONS?

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