

Graduate Executive Committee November 10, 2023 Minutes

Attendees:

Voting Members: Amanda Elder, Assma Sawani, Bob Camley, Carlos Diaz, Cerian Gibbes, David Moon, Henriikka Weir, James Pearson, Jeffery Ferguson, Jeremy Bono, Kara Holt, Katie Sullivan, Lavonne Johnson, Lei Zhang, Patrick McGuire, Rory Lewis, Steven Tragesser, Sylvia Mendez

Non – Voting Members: Amy Reynolds, Amy Sayer, Andrea Williams, Andrew Lac, David DuBois, Deanna Johnson, Hillary Fouts, James Van Scotter, Jennifer Newcomb, Jenny Russell, Jian Ma, Kelli Klebe, Kim Paine, Laurel Cartwright, Lauren Harriott, Mary Rupp, Megan Rogers, Nanna's Meyer, Rosey Reidl Smith, Sam Adams, Sarah Long, Shannon Johnson, Shouhuai Xu Stephanie Trujillo, Steve Bistricky, Wendi Clouse

Agenda Items:

• College of Business Proposal for Graduate Certificate in Space Cyber Enterprise Management (see proposal; James Van Scotter)

GEC voted to recommend approval of the proposal for Graduate Certificate and MBA emphasis area in Space Cyber Enterprise Management (18 in favor, 1 against, 0 abstain)

• College of Engineering Proposal for Changing Program Name from "PhD Security" to "PhD Cybersecurity" (see proposal; Shouhuai Xu)

GEC voted to recommend approval of the proposal for changing Program Name from "PhD Security" to "PhD Cybersecurity" (19 in favor, 0 against, 0 abstain)

- College of Engineering Proposal to expand Computer Science Accelerated Master's Program (see proposal; Rory Lewis)
 - Discussion on raising GPA to 3.25 led to a decision to withdraw GPA changes in proposal at this time and vote was only on adding BI programs in computer science

GEC voted to recommend approval of the EAS Proposal to change currently existing Computer Science Program to include Bachelor of Innovation – Computer Science, Bachelor of Innovation – Computer Security, Bachelor of Innovation – Game Design and Development (16 in favor, 0 against, 1 abstain)

- Changes to Graduate School rules (see proposed changes; Kelli Klebe):
 - GEC voted to recommend approval of changes to Graduate School rules on Dissertation policy for credits taken before and after completion of exams (13 in favor, 1 against, 1 abstain)
 - GEC voted to recommend approval of changes to Graduate School rules on Probation and Dismissal policy to include Student Conduct Expectations (15 in favor, 0 against, 0 abstain)
 - GEC voted to recommend approval of changes to Graduate School rules on undergraduate transfer credit policy (17 in favor, 0 against, 0 abstain)

• GEC voted to recommend approval of changes to Graduate School rules on time limits for completion of certificates (14 in favor, 0 against, 0 abstain)

Deans Report:

- Scholarships (see summary document)
 - Summary document about scholarships can be shared with students, staff, and faculty. Please do share. We also post graduate student funding on the Graduate School website <u>https://graduateschool.uccs.edu/uccs-finance-resources</u>
 - We will split the Graduate Research Fellowship into 2 different opportunities:
 - One for incoming students (summer and fall admits) who are nominated by their program
 - One for continuing students who will apply in the scholarship portal.
 - The scholarship portal is opening later this year (expected Jan 2 rather than Dec 1). Admitted applicants have access to the student portal even if they have not yet accepted the admission offer. They can apply for scholarships while in the admit status. Please advise your students.
- Application Fee Elimination Results (Program responses about keeping or eliminating and how they use)
 - Support or oppose elimination
 - 9 oppose elimination
 - Fees help them provide meaningful support
 - Fear of having nonserious applicants if there was no fee
 - 6 support elimination
 - Hope it will improve number of applications
 - 2 undecided
 - 2 support only if there is clear evidence of increasing serious applications
 - How fees used
 - 5 said currently not used (some are letting build up)
 - 2 did not specify if or how used
 - 12 use for student support in variety of ways
 - Student staffing for admissions for those colleges which centralize applications (2)
 - Travel, small scholarships, student funding (TA, RA, GA), graduate student events
 - These results have been sent to Provost to take to Vice Chancellors. Will keep you posted.

Informational Items:

• Please see flyer about Graduate Recruitment and Outreach. Deanna Johnson and Susan Eldridge are willing to work with you on recruitment for your graduate programs. Reach out to them!

Announcements:

- Mountain Lion Research Day December 8. Registration started October 9 (<u>https://research.uccs.edu/mlrd</u>)
- Save the date January 9 (5-7pm) for new student reception for Spring admits.
- 3MT priority registration deadline is December 15th and final registration is January 16th. Preliminaries will be held online and finals will be in-person on Thursday, Feb 1 at 3pm in Berger Hall.
 - Registration form: <u>https://forms.gle/BzfMQmgJKy9PAbGP7</u>
 - More information is available on the website is here: <u>https://graduateschool.uccs.edu/current-students/mountain-lion-grad-slam</u>
- Commencement Ceremony is December 15 (<u>https://commencement.uccs.edu/</u>)

GEC Meetings for (Academic Year) all meetings are from 10:00-11:30

- Fall GEC Meetings: 12/8
- Spring GEC Meetings: 2/9, 3/8, 4/12, 5/10

Certificate Approval Form

PART I

- 1. Name of Certificate: Graduate Certificate in Space Cyber Enterprise Management
- 2. Department(s): Department of Marketing, Strategy, and International Business
- 3. College(s)/Institutions: College of Business
- 4. Faculty Director/Advisor: Martin Key, Ph.D. / James R. Van Scotter, Ph.D.
- 5. Type of Certificate: Gainful Employment
- 6. Expected start date (semester and year): Fall 2024
- 7. Number of required credit hours: 12 credit hours
- 8. Anticipated length of the program in semesters including summer: 1 year (Fall A 8-week: 3 credits, Fall B 8-week: 3 credits, Spring A 8-week: 3 credits, Spring B 8-week: 3 credits)

9. Describe the certificate program.

a. How the certificate program fits the unit's role and mission.

UCCS College of Business: https://business.uccs.edu/about/vision-and-mission

Our Vision

"We are in the business of building successful futures."

- This Vision Statement directs our faculty to prepare the future workforce for the challenges and opportunities of the future. The future business workforce, especially in the Colorado Springs region will require leaders and managers who know how to achieve organizational goals in the domain of space and cybersecurity for space.

Our Mission

"The UCCS College of Business delivers a **future-oriented business education to support workforce and economic development for southern Colorado, the state, nation, and world.** We prioritize and empower learners at every stage of their educational journey, develop innovative research that contributes to scientific discovery and effective business practice, and serve as a hub for our community in productive discourse, practical learning, and social responsibility."

- Colorado Springs area has 5 military bases including a substantial Space Command and Space Force presence. There is a large population of local military and veteran residents interested in graduate education opportunities in space and cybersecurity.
- Colorado is the 2nd largest aerospace economy, with nine of the top aerospace contractors (<u>http://www.spacecolorado.org/why-colorado/industry-overview/</u>). These are large businesses that need not only engineering education from the UCCS College of Engineering and Applied Sciences, but also Business Administration graduate education opportunities in Space Cyber Enterprise Management. The Colorado Space Coalition's Directory lists more than 500 aerospace business companies in Colorado (<u>http://www.spacecolorado.org/do-business/company-directory/?l=A</u>). In addition to DOD employees, we anticipate serving this commercial space industry market in addition to the cybersecurity companies that work closely with them.

b. Courses and requirements (e.g., minimum grades) to complete the certificate.

The certificate will require completion of 12 credits (all online). These courses include:

- 1. SPMG 6000 Principles of Space Business (3 credits)
- 2. SPMG 6600 Intro to Space Cybersecurity for Managers (3 credits)
- 3. SPMG 6700 Cybersecurity and Space Law, Regulation, and Business Policy for Managers (3 credits)
- 4. SPMG 6800 Fundamentals of Space Cyber Intel and Analysis for Managers (3 credits)

c. Admission criteria (at a minimum must follow criteria delineated in policy but program may have higher standards)

Bachelor's degree from a regionally accredited university with a cumulative grade point average of 3.0 or better.

d. The exit process.

Students need to complete required courses with requisite grades as per UCCS policy. In order to graduate, the Graduate Certificate in Space Cyber Enterprise Management completion form has to be signed by the Director of Graduate Programs and Dean, Graduate School of Business Administration.

e. Costs of offering the certificate program.

Four (SPMG) courses for the proposed certificate will be offered utilizing existing faculty and resources at the College of Business. The required courses for the Certificate are the same series of four space-cyber classes as the Space Cyber Enterprise Management Area of Emphasis in our Master of Business Administration program.

f. Expected benefits, income, return on investment (for students).

Students successfully completing the program will be awarded UCCS Graduate Certificate in Space Cyber Enterprise Management. The certificate trains students from diverse technical and non-technical backgrounds by providing basic cross disciplinary knowledge of space and cybersecurity at a level appropriate for business workers, managers, and leaders in the space cyber industry. Among companies and leaders in the space industry and in cybersecurity, there is a strong desire to build a more broadly diverse workforce by including workers from non-traditional backgrounds. Colorado Springs also has a unique and significant military and veteran community with professional technical training, active security clearances, and a strong interest in transitioning from DOD to the local commercial space industry. This certificate will provide those workers with a credential to help them enter jobs in the commercial space and cyber industry and apply their transitional DOD skills in jobs working for DOD contractors.

Cyberseek.com indicates that there are currently <u>755,743</u> job openings for workers with cyber-related skills in the United States. There is not enough supply to meet the demand. In Colorado Springs alone, there are currently 7,214 cyber related job openings according to Cyberseek. Searching Indeed.com with the term "Space Cyber" revealed 8,988 jobs in the USA and 515 jobs within 100 miles of Colorado Springs, but this same search found 358 of those jobs were within 25 miles of Colorado Springs, 299 within 15 miles, and 291 within 10 miles. This indicates that Colorado Springs is really the main hub for "space cyber" jobs in the state of Colorado.

Of the 515 space cyber jobs in the Colorado Springs area, not all of them posted salaries, but for those that did 377 were above \$75k, 306 jobs were above \$95k, 230 above \$110k, 159 above \$120k, and 78 jobs above \$140k. For comparison, the space cyber industry in Colorado Springs is so significant that the 358 jobs identified by Indeed.com (within 25 miles of Colorado Springs) using the search terms "Space Cyber" were, in fact, more jobs than were identified searching "electrical engineering" (197 jobs), "mechanical engineering" (40 jobs), or even traditional business jobs like "marketing" (251 jobs), "accounting" (214 jobs), and "finance" (156 jobs), all within 25 miles of Colorado Springs. Moreover, the combined terms "space cyber" are more restrictive than the search term "cyber" alone which yielded 458 jobs within 25 miles.

Searching "Space Cyber" jobs outside of the Colorado Springs local area yielded approximately 8,473 jobs postings. These jobs are mostly located in other regions with active commercial space industrial activity. This is a growing occupational field, but UCCS is well situated to be a dominant player in providing space cyber training for businesses and DOD employees, because of the other space assets in our local economy: 5 bases including Space Force/Space Command activities, growing commercial space business community, Space Symposium based here for 38 years, Space Foundation, Space ISAC and the National Cybersecurity Center, and UCCS College of EAS has degree programs in aerospace engineering, and space operations.

The certificate program we are proposing does not provide all of the training a person would need to have a great career in the space industry, but that is also not how graduate business certificates generally work. Graduate business certificates, like this one in Space Cyber Enterprise Management," are typically used for upskilling current employees to make them more effective in their jobs, or for assisting professional workers who already possess a bachelor's degree and are transitioning into a new career field, or a new industry. For example, an existing project manager, might pursue this certificate to help gain a position as a project manager in the space industry. Similarly, a cybersecurity analyst, might want this certificate to help gain a cyber security position for a local space industry defense contractor. A sales or marketing manager, might want this certificate to help gain industry knowledge if transitioning to work in sales and marketing jobs in the space industry. Here are some examples from recent job postings in which candidates with our proposed certificate would have an advantage:

- 1. Talent Acquisition Specialist at Kratos (\$75,000-\$95,000). This is a Human Resources position for person with a non-specified Bachelor's degree and experience recruiting job candidates. However, in the job description for the Talent Acquisition Specialist, it says, "In this position, you will collaborate with engineering business leaders to create and implement recruitment strategies that drive our business forward. With a focus on candidate experience and delivering results, this role is critical to our long-term success in the Defense, Space, and Security business. We invite you to join us in our mission to secure the best engineering talent to help build the future of aerospace and defense." In the Experience & Skills portion of the job posting the criteria also includes "Experience sourcing, engaging, and hiring software engineers, RF Engineers and SATCOM professionals."
 - Since not many HR specialists also have skills in engaging Satellite
 Communications professionals, at least having some background in Space
 Cyber Enterprise Management might help the student obtain the position.
 - Median annual salary for a Human Resources Specialist in Colorado is \$81,500 according to <u>https://www.bls.gov/oes/current/oes131071.htm#st</u>, so getting an MBA or Certificate in Space Cyber Enterprise Management, could help the HR professional moderately increase their salary.
- 2. Technical Writing Manager at Kratos (\$115,000-\$165,000). "Kratos is a leader in assured aerospace communication solutions and services... We are looking for a dynamic Technical Writing Manager to set the content and documentation strategy,

drive key documentation decisions, and work at the intersection of Product Development, Engineering, Sales, Marketing, and Customer Support."

- Since Kratos operates in the Space and Cyber domain, a candidate for this
 position with a strong technical writing background would likely benefit from
 obtaining an MBA with emphasis in Space Cyber Enterprise Management or a
 certificate in Space Cyber Enterprise Management from our program.
- Median annual salary for a Technical Writer Colorado is \$86,870 according to https://www.bls.gov/oes/current/oes273042.htm#st, so getting an MBA or Certificate in Space Cyber Enterprise Management, could help the Technical Writing professional increase their salary significantly.
- 3. Accountant Government Billing at Aerospace Corporation (\$74,000-\$115,000). "The Aerospace Corporation is the trusted partner to the nation's space programs, solving the hardest problems and providing unmatched technical expertise... Under limited supervision, the Accountant prepares, distributes, and reconciles timely / accurate invoices to our government and commercial space clients that are contract and FAR compliant... Minimum Requirements: Bachelor's degree in Accounting, Finance, or related discipline... Experience with government contracting regulations (e.g., FAR, DFAR, NASA), rates (e.g., overhead, CAS-414, and fee) and different contract types (CPFF, FFP, T&M, Grants, etc.)
 - Since this position requires familiarity with government contracts, Federal Acquisition Regulations, and commercial space clients, an MBA or a Certificate in Space Cyber Enterprise Management would probably help an applicant get the job.
- 4. **IT Project Management Specialist III at Aerospace Corporation** (\$85,550-\$137,009). "The Defensive Cyber Operations section in the Cyber Defense Solutions Department (CDSD) is looking for an IT Project Manager to join our growing team who design, implement, and deploy cyber solutions to defend our nation's most valuable assets in space. We support a variety of customers including the Space Force's Space Systems Command (SSC), the National Reconnaissance Office (NRO), and other civil customers (e.g. NASA, NOAA) in order to resolve unique challenges in protecting their ground networks and satellite systems from sophisticated adversaries."
 - This position requires cybersecurity experience and professional certifications, "Hold at least one or more security certifications (CEH, GSEC, Security+)," so a person with these qualifications and some additional understanding of the space domain would have an advantage in applying for this position.

Hence, a certificate in Space Cyber Enterprise Management would not prepare the student for a new career, but would make existing skills more valuable to a potential employer. While this application is just for the certificate, it is also our hope that many of these certificate students will decide to remain at UCCS to complete their MBA.

Table 1 lists recent job postings from some of the DOD contractors in the local Colorado Springs area. We anticipate that job candidates who have earned our Certificate in Space Cyber Enterprise Management, or students who have earned an MBA with this emphasis area, would likely be at an advantage in applying for these types of positions. We also anticipate that employees working in these types of positions may wish to pursue higher education opportunities that, like the MBA or the Grad Certificate, in order to advance their careers by moving into higher management positions.

Table 1. Space Cyber Roles, Job Openings & Salary (Source: Indeed.com sampling of space					
cyber related jobs - current openings - within 25 miles of Colorado Springs)					
Skill-	Role	Company	Average		
level			Salary		
None	Junior Level Cyber Security Test Engineer	SAIC (Space Force Contract)	\$50 to 75k		
Entry-lvl	Space/Counterspace Analyst	Avantus Federal	\$87.2 to 100k		
Entry-lvl	Warfighting Analyst	ExoAnalytic Solutions	\$80 to 105k		
Entry-lvl	Cybersecurity Manager	Lockheed Martin Space	Not listed		
Entry-lvl	Missile Warning Instructor	Bowhead	\$90 to 110K		
Mid-lvl	Cyber Range Trainer	Tyto Athene	\$115 to 130k		
Mid-lvl	RMF Cybersecurity support	Tyto Athene	\$70 to 90k		
Mid-lvl	Governance, Risk, and Compliance	Frontgrade	\$108 to 141k		
	Manager				
Mid-lvl	Project Manager	Peraton	\$80 to \$100k		
Mid-lvl	IT Service Desk Trouble Ticket Manager	Tyto Athene	\$65 to 85k		
Mid-lvl	Information Security Analyst	Isys Technologies	Not Listed		
Mid-lvl	Defensive Cyber Operations Analyst	Booz Allen Hamilton	\$65 to 149k		
Mid-lvl	Systems Administrator	Peraton	\$80 to 100k		
Senior-lvl	MSS Control Account Manager	Northrup Grumman	\$107-160k		
Senior-lvl	Sr. Enterprise Services Program Manager	Northrup Grumman	\$122 to 184k		
Senior-lvl	Security Threat Analysis Senior Manager – Space Portfolio Manager	Peraton	\$155 to 194k		
Senior-lvl	Program Manager	Aegis Aerospace	Not Listed		
Senior-lvl	NORTHCOM Consulting Project Manager/Business Development	Oracle	Not Listed		
Senior-lvl	Sr. Risk/Vulnerability Analyst Manager	Bigbear.ai	Not Listed		

• Note: These jobs indicate a space cyber domain expertise but also management and analyst roles. These are local DOD contractors tied to Space Force or Space Cmd.

Return on investment (for students): This return is difficult to calculate for a few reasons. First, many DOD employees and defense contractors offer employee educational benefits that make the cost to the employee either free or drastically reduced. Some employers will pay the full cost for graduate certificates, but not the full cost of an MBA. Some offer partial tuition reimbursement for the full MBA, depending on academic performance, while others offer

full tuition reimbursement. The purpose for this certificate is to help students gain new knowledge and skills, but it is also important to recognize that this certificate is designed to help students transfer their existing skills into substantially similar roles in the space sector. Therefore, because the salary gains vary with the compensation rates in the different career fields, the specific income gains are difficult to quantify. This graphic from the 2021 Space Report, published by the Space Foundation cites data from the Bureau of Labor Statistics showing that salaries in the Space Sector are significantly higher that other types of jobs. https://www.thespacereport.org/uncategorized/2021-u-s-labor-data-shows-benefits-of-space-sector-pay/.

While there is a very large demand for Aerospace Engineering workers, there is also a very strong demand for space sector workers in non-technical and business jobs.

"The demand for workers in a growing space economy extends beyond engineers or program managers. According to a recent blog post by EVONA, an international recruiting firm for the space sector, the skillsets companies are hiring for at the fastest rate were non-technical. Companies saw the fastest rate of growth in need for the operations professionals, such as management, accounting, human resources, inventory and others." <u>https://www.kratosdefense.com/constellations/articles/what-are-the-highestdemand-skills-in-the-space-industry</u>

g. If applicable, describe any fees (e.g., program, course, application) that you will charge. (Note: You will need to follow campus procedures for fees.)

The fees involved include the application processing fee of \$60, and online fee of \$100 per course.

h. If you are proposing a non-notated certificate, please explain why this is the best type of certificate and why you are not using a CoS or PD certificate. Please submit a plan for how you will inform students that the certificate will not be notated on official university transcripts.

Not applicable.

PART II (for GE Certificates)

- 1. **Program website URL for certificate program**: <u>https://www.uccs.edu/business/programs/masters/graduate-business-certificates</u> SPACE CYBER ENTERPRISE MANAGEMENT will be added once approved.
- 2. Provide a narrative description of how the institution determined the need for the program.

According the <u>Colorado Springs Chamber of Commerce</u>, the Aerospace and Defense industry makes up 44% of the local Colorado Springs economy. The College of Business currently offers business education and cybersecurity programs that serve the defense sector of this local job market; however, in the recent past, the College of Business at UCCS has also offered graduate business education and certificate programs for Space professionals. From 2007 until 2013, it was possible for UCCS College of Business MBA students to pursue an emphasis in Space Systems Management. See the graduate catalog for 2012-2013:

https://catalog.uccs.edu/preview_program.php?catoid=8&poid=1202&returnto=315 Excerpt from 2012-2013:

(Distance) Space Systems Management MBA—15 Hours A major challenge facing the military and civil space industries is the ability to develop and manage space-based systems to meet ever increasing demands of greater capabilities and greater integration with ground-based systems. Graduates with a strong business background combined with knowledge of space systems and their development and management are in demand by both public and private sector organizations.

Students who choose an area in Space Systems Management will take 21 semester hours of MBA core courses and 15 semester hours of Space Systems Management (SPMG) elective courses.

Complete the Following Courses: SPMG 6190 - Systems Engineering Management SPMG 6290 - Information and Communications Systems SPMG 6390 - Space and Space Systems SPMG 6490 - System Lifecycle Management SPMG 6590 - Space Policy

This program of study existed for a few years as the only AACSB accredited MBA program with an emphasis on Space Management anywhere in the world. Until 2021, there were no other AACSB accredited colleges of business in the world that had their own, in-house, MBA emphasis/certificate program with a space focus. In Fall of 2021, ASU Thunderbird launched an Executive Master of Global Management degree focused on Space Leadership, Business, and Policy; however, this program is targeted for the professional executive market and does not have a cybersecurity focus like the certificate proposed in this application.

https://thunderbird.asu.edu/degree/executive/executive-master-global-management-space-leadership

There are also other MBA programs that offer a focus on aerospace, but the actual focus is on aircraft, transportation, and defense (DOD), not commercial space or cyber. <u>https://go.pricemba.ou.edu/emba?utm_source=google&utm_medium=cpc&utm_campaign=1389</u> <u>Non-Brand_EMBA&utm_content=Aero-Defense&utm_segment=1389_Non-Brand_EMBA&gclid=CjwKCAiAjPyfBhBMEiwAB2CCIurKsxt-0HU9UAzL-eCGdZIsWUGiw13sP3N0piOnb_qQLmc-5ZA2lhoCUkMQAvD_BwE</u>

There are also other programs that offer some space industry education like the International Space University <u>https://www.isunet.edu/mss/</u>, Nova Space <u>https://novaspaceinc.com/</u>, and others, but those schools are not offering an AACSB accredited business education.

Finally, there are AACSB accredited programs that offer dual degrees so a person could earn an MBA while simultaneously completing a totally separate Master of Science Degree in Space Studies (in the Space Studies Department outside the College of Business) <u>https://ga.rice.edu/programs-study/departments-programs/business/business/business-administration-mba-space-studies-mssps/#requirementstext</u>.

However, there are no AACSB accredited graduate business programs that offer accessible educational opportunities for the commercial or DOD space workforce of the future, which will require familiarity with both space missions and cybersecurity domains.

Over several years, UCCS College of Business faculty teaching in our MBA capstone Strategic Management course, while discussing students' business experiences and future career plans, observed that a substantial number of our current MBA students (approximately 30-35%) are already employed by companies that serve the local space economy in Colorado Springs. Many of these are veterans and DOD contract employees, but some are also engineers and other skilled workers completing their MBA for upward mobility and promotions within their company, or for ex-military members transitioning to the civilian workforce and DOD contractor space careers. Following up on this observation about the space industry, our faculty began to poll MBA students every semester about who would be interested in pursuing MBA coursework focused on space business if it were offered. Typically, over about 3 years of polling MBA classes the portion endorsing the idea of space business training was about 50%. This matches trends in MBA student interests observed outside of UCCS. (Some examples)

- <u>https://find-mba.com/articles/mba-students-are-barnstorming-the-space-industry</u>
- https://www.ft.com/content/5c2ff30c-e0c4-11e6-9645-c9357a75844a
- <u>https://www.wsj.com/articles/SB10001424052748703514904575602713703102920</u>
- <u>https://poetsandquants.com/2022/12/16/2022-most-disruptive-mba-startups-ensemble-space-labs-wharton-school/</u>

• <u>https://www.wharton.upenn.edu/story/in-the-classroom-technology-innovation-and-entrepreneurship-in-the-new-space-era/</u>

If this is so popular, why did the previous Space Systems Management program end?

- 1. The program concept was ahead of its time by about 10-15 years.
 - a. The global space economy revenue was estimated at about 220 Billion in 2006;
 - i. <u>https://www.defensedaily.com/global-space-industry-revenue-soared-18-percent-to-220-billion-last-year/space/</u>
 - b. According to Statista, in 2021, the estimate for the global space economy was 469.3 billion.
 - i. <u>https://www.statista.com/statistics/662231/space-economy-breakdown-globally-by-sector/#:~:text=Global%20revenue%20from%20the%20space,U.S.%20dollars%20in%20that%20year.</u>
 - c. Morgan Stanley estimates the space economy at \$1.1 Trillion by 2040, and Bank of America Merrill Lynch estimates \$2.7 Trillion by 2050. <u>https://www.cnbc.com/2017/10/31/the-space-industry-will-be-worth-nearly-3-trillion-in-30-years-bank-of-america-predicts.html</u>
 - d. Over this period the majority of growth has been in commercial space, not government spending. Demand for engineering education in the space industry will continue to grow, but the space and cyber industry will also require professional business education.
- 2. The previous program was too focused on military operations and missions, with not enough focus on commercial space.
- 3. The program relied too heavily of instructional support from adjuncts and Air Force Academy instructor support. Our goal in the College of Business is to have regular UCCS COB faculty (TT, NTT, IRC) teaching these classes who can also act as champions for the program to help grow enrollments.
- 4. The former program required 15 credits, 5 courses, taking approximately 2 years to complete. Other MBA emphases and certificates only require 12 credits, 4 courses.

3. Provide a narrative description of how the program was designed to meet local market needs, or for an online program, regional or national market needs.

After determining that there was interest among current College of Business MBA students and learning that many were already employed in the Space Industry, Dr. James R. Van Scotter obtained permission in fall of 2018 to form an advisory group to begin discussing how to proceed.

In 2019, Dr. Van Scotter joined the Air Force Academy's Space Law group and began attending their virtual meetings. Input was received from experienced executives and space industry experts over these several years.

In 2021, Dr. Van Scotter joined the Space ISAC Workforce Development Community of Interest, attended Space Symposium, and was awarded curriculum development funding from a Cybersecurity grant supported by the State of Colorado for development of a Space Cyber Enterprise Management Certificate and MBA emphasis. Guided by input received from space industry experts and local business leaders, the first two courses were approved by our MBA Team committee and fully developed in spring 2022 (SPMG 6000 Principles of Space Business, and SPMG 6600 Cybersecurity for Space).

In 2022, Dr. Van Scotter also attended workshops at Space Symposium on curriculum development for the future space workforce, space law, and many networking events with space industry leaders, always seeking input about what should be included in course offerings. At Space Symposium, Dr. Van Scotter had a personal meeting with General Shaw to exchange ideas about what the role the UCCS College of Business could play in educating the future workforce, especially through management and leadership education for the future space workforce. Finally, at Space Symposium, Dr. Van Scotter and Dr. Martin Key, both together conducted approximately 20 different informal interviews with space industry companies who could potentially hire students obtaining our graduate certificate in Space Cyber Enterprise Management and the associated MBA emphasis. The response was overwhelmingly positive. We anticipate Space Symposium will be a major venue for interviews and hiring opportunities for our students.

In fall 2022, Dr. Van Scotter was a co-presenter at the Value of Space Summit at the National Cybersecurity Center in Colorado Springs, where additional conversations took place about curriculum for this program. Also, in Fall 2022, with financial support from renewed grant funding for cybersecurity curriculum development, the MBA team approved the creation of SPMG 6700 Cybersecurity and Space Law, Regulation, and Policy for Managers, and SPMG 6800 Space Cyber Intel and Analysis. The curriculum for the law course was built of recommendations coming from an advisory group member at Air Force Academy who teaches Space Law to Space Force officers. The curriculum for the Space Cyber Intel and Analysis course was built off of recommendations from the same Space ISAC professionals who monitor cyber threats to commercial space interests and create the intelligence reports for industry partners.

The U.S. The Bureau of Labor Statistics does not track employment data for the space-related defense industry, but the <u>Colorado Springs Chamber & EDC</u> claims that there are 250 aerospace and defense companies in the Colorado Springs area. <u>Glassdoor</u> shows 155 aerospace and defense companies in Colorado Springs. Perhaps this discrepancy is based on geography regarding what

is considered in the Colorado Springs area versus within city limits, or perhaps it is based on how aerospace and defense are classified versus manufacturing, technology, and other classifications for related industries. Regardless, the space industry in Colorado Springs area is large and growing rapidly.

Data from the AIAA and Colorado Springs Chamber of Commerce demonstrates that the aerospace industry is now seeking qualifications typically associated with graduate business education, like leadership, project management, and administrative support, and business-related technical skills like cybersecurity, business analytics, and computer skills.

https://www.aiaa.org/resources/2022-aerospace-and-defense-workforce-study

4. Provide a narrative description of any wage analysis the institution may have performed, including any consideration of Bureau of Labor Statistics wage data related to the new program.

The wage analysis was performed based on data from Indeed.com and CyberSeek (program of NIST, US Department of Commerce). Please see section 9.f of Part I.

5. Was the program reviewed and approved by any external groups?

The development of this program has been reviewed and approved at various stages of the development of the individual courses. The Principles of Space Business course was developed based on inputs and recommendations of several industry experts. The Space Policy course was developed by a Space Law faculty member at the U.S. Air Force Academy. The Space Cyber Intel and Analysis course was developed based on inputs and recommendations of partners at Space ISAC. The overall curriculum for the entire Space Cyber Enterprise Management certificate has been developed based on information and discussions with industry experts at Space Symposium 36 & 37, (2021 & 2022), The Value of Space Summit at Space ISAC in 2022, and during regular meetings of the Space ISAC Workforce Development COI 2020 - present. After the MBA Emphasis/Certificate program is approved, we will seek external review from industry partners to further refine the curriculum based on company feedback, student feedback, and feedback from other industry experts.

6. Provide a narrative description of how the program was reviewed or approved by, or developed in conjunction with, the entities selected in #5. For example, describe the steps taken to develop the program, identify when and with whom discussions were held, provide relevant details of any proposals or correspondence generated, and/or describe any process used to evaluate the program. The institution must retain, for review and submission to the appropriate federal agencies upon request, copies of meeting minutes,

correspondence, proposals, or other documentation to support the development, review, and/or approval of the program.

The program content was developed by faculty members with expertise in business strategy, analytics, and operations, who also happen to have experience and knowledge of space, national defense, and cybersecurity management and information systems. One faculty member used past experience in cybersecurity program development. Another faculty member is a U.S. Air Force veteran and a former DOD contractor employee who worked on a contract for the U.S. Army's 5th signal command with a broad technical background in applied physics/metrology, missile guidance systems, RF signal transmission, and space-related technologies, satellites, etc. Faculty members used their own expertise as a basis for course and curriculum development but sought additional training and inputs from outside experts. One faculty member joined the Space ISAC Workforce Development COI, participated in Space Law workshops at Space Symposium, studied basic astronautics and orbits mechanics, studied the space and cyber law materials received from contacts and Air Force Academy and regularly attended the virtual meetings of the USAFA's Law, Technology, and Warfare Research Cell. Another faculty member participated in additional cybersecurity training programs to obtain new skills related to the Space Cyber industry context. The program was reviewed by the MBA Team, a curriculum committee, to ensure the appropriateness of the courses, and course content at various meetings 2020-2023, and the overall Space Cyber Enterprise Management Emphasis/ Certificate Program, February, 21, 2023. Subsequently, the certificate program was reviewed and approved by College of Business Dean's Executive Committee, March 9, 2023.

7. Describe how you will determine the on-time completion rate, job placement rate, and median loan debt in order to disclose the information on the departmental website.

We will use an exit survey of graduating students and coordinate with the campus financial aid office and institutional research office to gather required data for reporting purposes. This fully online certificate will typically be completed in 1 year.

8. When do you intend to begin disbursing Title IV funds to students: Spring 2024

	Per 3-Credit Course		Total Certificate Cost	
	Resident	Non-resident (Online)	Resident	Non-resident (Online)
Tuition and fees	\$2649	\$2820	\$10,596	\$11,280

9. Estimate the cost of the program:

Room and board	N/A	N/A	N/A	N/A
Books and supplies	\$400	\$400	\$1,200	\$1,200

Additional explanation of costs, if necessary (e.g., cost per credit hour):

To finish in one year, the student will need to take two courses per term in fall and spring terms, which is feasible to do.

In the UCCS College of Business, we cap online graduate courses at 30 students. If we were to fill the 4-course sequence (100% Capacity) with Colorado residents, the program would bring in \$317,880 in tuition, per cohort. Given the very large demand for this program, we do expect to fill this program to capacity in the first year and also anticipate a waiting list. Opening a second cohort is possible if the demand justifies it. The courses will be taught using existing faculty and adjunct instructors. Tenured and Tenure Track Faculty are compensated at \$8k to \$10k per overload. Adjuncts with terminal degrees are typically compensated at \$4.5 to \$5k per course. Assuming the worst-case scenario, the highest cost of TT faculty salary and fringe for teaching all 4 courses would be \$53,560. This instructional cost would likely be much lower because we expect to use some adjunct instructors. We would not run these courses with less than 6 students, to make sure the program is revenue positive.

Through a collaborative effort, the UCCS College of Business is planning to use some Cyber grant funding (\$20,000+) for marketing the Space Cyber Enterprise Management Grad Certificate and MBA program emphasis, along with marketing for other space and cyber programs in the College of Engineering and Applied Sciences. We will advertise and promote this program through our partnerships with Space ISAC and the National Cybersecurity Center, and at Space Symposium 39, in April, 2024. With this marketing campaign, we expect to fill the first cohort. If the program were extremely successful, the maximum instructional cost for filling a second cohort (up to 30 additional students) would be an additional \$42,848, because faculty are only compensated \$8k + fringe for additional overloads.

10. Using the Standard Occupational Classifications http://www.bls.gov/soc,

a. Select the primary occupational group for which the Gainful Employment Program will train the student:

There is no specific primary occupational group for this Gainful Employment Program, just like there would not be primary occupational group for students earning a general business Bachelor's degree or a general business MBA, even though these general business degrees tend to be the most popular business majors. Similarly, there is not a single category specifically for Space Cyber Enterprise Management or even for space-related DOD contractors. Instead, the purpose of this Certificate program is for students to be able to transfer existing skills into the space sector, where salaries are higher. The

training program will instead prepare students with existing professional skills and abilities for careers in the space and cybersecurity industry.

Since there is not a category specifically for Space Cyber Enterprise Management or even for space-related DOD contractors, the closest similar job description might be for Computer and Information Systems Managers

https://www.bls.gov/ooh/management/computer-and-information-systems-managers.htm

Quick Facts: Computer and Information Systems Managers					
2022 Median Pay	\$164,070 per yea \$78.88 per hour				
Typical Entry-Level Education	Bachelor's degree				
Work Experience in a Related Occupation	5 years or more				
On-the-job Training	None				
Number of Jobs, 2022	557,400				
Job Outlook, 2022-32	15% (Much faster than average)				
Employment Change, 2022-32	86,000				

What Computer and Information Systems Managers Do

Computer and information systems managers plan, coordinate, and direct computer-related activities in an organization.

We acknowledge that this is not perfect fit for our program; however, our program is actually designed to help existing technical and non-technical (administrative) professionals transfer their skills into the space sector.

List all six-digit codes that reflect occupations in which the graduates of the proposed program will be trained for employment:

These are some of the best possible fitting jobs since space and defense related jobs are not explicitly provided. (Note: O*Net does not include key terms "cyber," "cybersecurity," or "space" in any of their indexed job titles.)

- 15-1122.00 Information Security Analysts
- 13-1199.04 Business Continuity Planners
- 11-3021.00 Computer and Information Systems Managers
- 13-1082.00 Project Management Specialists
- 13-1111.00 Management Analysts

CIP Code: 52.0216 Science/Technology Management Note: this is a new CIP Code, just created in 2020

Other possibly appropriate CIP codes: 29.0601 Military Technology and Applied Sciences Management 52.0201 Business (Other)

11. Have you read the Gainful Employment regulations posted at http://www.ifap.ed.gov/GainfulEmploymentInfo/index.html and are you aware that failure to comply and failure to meet "gainfulness" could make your program ineligible for the Title IV financial aid on an annual basis?

Yes. All of the information available at the link posted above was read.

Have you reviewed the regulations for any further requirements in the application? Yes

Proposal for Changing Program Name from "PhD Security" to "PhD Cybersecurity"

Proposal: The Department of Computer Science would like to propose to change the program name of its "PhD Security" to "PhD Cybersecurity".

Justification: The justification for this change is:

- 1. For branding purposes: We want to make Cybersecurity a major UCCS brand, as per the UCCS Cybersecurity Strategy.
- 2. For streamlining purposes: Universities in the nation are creating "BS Cybersecurity" programs. The proposed name change would increase the opportunity to attract more students from nationwide to our ME Cybersecurity and/or PhD Cybersecurity program.
- 3. The word "Security" in "PhD Security" had a specific historic background: It was a time a certain federal agency was interested in certain aspect of security (but not cybersecurity). However, the agency is no more interested in this aspect.

The Department Faculty has voted unanimously on 10/10/2023 to support this change.

Timeline: The new program name, once approved, will be effective in Fall 2024.

CIP code (CIP 2020):

- Primary: <u>11.1003</u>) Computer and Information Systems Security/Auditing/Information Assurance.
- Secondary: <u>43.0404) Cybersecurity Defense Strategy/Policy.</u>

Execution Plan: Students admitted in Spring 2025 will be in the PhD Cybersecurity Program automatically. Students entered the Program prior to Spring 2025 will have the option to stay in the PhD Security Program, or switch to the PhD Cybersecurity Program by requesting a petition, which will be reviewed and approved by the PhD Cybersecurity Program Director.

ngal Lunar Jakk

10/18/2023

Jugal Kalita, Chair, Department of Computer Science

onald a. Raber 10/18/2023

Donald Rabern, Dean, Engineering and Applied Science

Nancy Marchand-Martella, Provost

Jennifer Sobanet, Interim Chancellor

ACCELERATED MASTER'S PROGRAM OFFERINGS FROM THE COMPUTER SCIENCE DEPARTMENT

Background:

The Accelerated Master's Program (AMP) in Computer Science (CS) allows high achieving students to pursue the Bachelor and Master of Science degrees in an accelerated manner. The program is for currently enrolled full-time UCCS students and allows these students to take up to six credit hours of courses which will count towards graduation requirements for both their Bachelor of Science (BS) or Bachelor of Arts (BA) in Computer Science and Master of Science (MS; ME) CS degrees. The master's degrees included in this proposal are: MSCS, MSCS-GMI, ME Cybersecurity, and MESE.

Proposed Changed:

Currently, the Bachelor of Science (BS) and Bachelor of Arts (BA) in Computer Science degrees are eligible for this program. The faculty wish to add the following programs, effective immediately.

Bachelor of Innovation – Computer Science Bachelor of Innovation – Computer Security Bachelor of Innovation – Game Design and Development

The Computer Science department also wishes to make the minimum grade point needed to 3.00. The GPA needed for students to maintain should also be 3.00.

All previous rules and regulations will stay in effect, except those items mentioned above.

Dr. Rory Lewis

Assistant Professor of Computer Science

New update program information.

To participate in the Accelerated Master's Program, the student will fill out an "Intent application" while they are a full-time UCCS student in the BS/BA/BI Programs in CS. Transfer students must complete at least 24 credit hours at UCCS before submitting their intent to enter the program. Current students may submit their intent after they have completed a minimum of 30 credit hours of the CS core courses. The typical standard for acceptance into the program is a cumulative G.P.A. of 3.00. After this intent application is accepted, students are expected to maintain full-time status during the AMP (an average of 24 undergraduate credits or 12 graduate credits per year, or equivalent combinations thereof such as 12 undergraduate and 6 graduate credits).

After the BS/BA/BI requirements are completed, students in the AMP program will receive their BS/BA/BI degree. During the final year of the BS/BA/BI, students will apply for the MS in the usual manner to receive six hours of credit towards Masters programs offered by CS. Students admitted to the accelerated degree program will complete CS Masters plan of study for review. This review will be conducted the semester in which the student will complete the BS/BA/BI requirements. A student will be considered eligible to continue AMP upon meeting the following minimum standards and criteria: completion of the requirements for a Bachelor of Science/Arts/Innovation with a minimum cumulative G.P.A. of 3.00, and maintenance of full time status. Approval of the Plan of study by the respective Program Director of the selected master's degree program is **required** so that eligibility to continue in AMP is approved by the CS Department.

Upon determination of eligibility to continue in AMP, the student will be recommended for formal admission to the Graduate School by CS Department. Such a recommendation must be made by the CS Graduate Program Director. Upon approval of the recommendation, the office of the Dean of the Graduate School will complete the necessary procedures to admit the candidate as a graduate student for the completion of their program.

The Accelerated Master's degree program will be administered jointly by the Graduate School and College of Engineering and Applied Science (EAS). CS will assume primary administrative authority and responsibility reflecting the full authority and standards of both the BS/BA and Master's degree. The Director of each Master's degree program will serve as the program administrator for the accelerated degree program for their Master's degree including required advising.

Application Process

Process for Declaring Intent

Minimum Standards and Procedural Elements

- 1. Students in the accelerated degree program must be full-time, continuously enrolled students (average 24 undergraduate credits or more per year, or 12 graduate credits per year or more, or equivalent combinations thereof such as 12 undergraduate and 6 graduate credits). Students must maintain a minimum cumulative G.P.A. of 3.00 throughout their enrollment.
- 2. Only currently enrolled UCCS students may be considered for admission to the program. Transfer students must complete at least 24 credit hours at UCCS before applying to the accelerated program.
- 3. Minimum standards for admission require a cumulative G.P.A. of 3.00. The Director of the selected Master's degree program will be responsible for all admissions procedures and decisions.
- 4. Issues of satisfactory academic progress, petition/appeal, transfer credit and grievance will be the responsibility of the accelerated Program Director with participation by the CS Chair, EAS Dean, and Graduate Dean as appropriate. The accelerated Program Director will be responsible for dismissing or placing on probation those students who do not maintain the minimum requirements stated above.
- 5. Accelerated degree students may not be admitted to a Ph.D. program prior to completion of both the Bachelors' and the Masters' degrees.
- 6. Students in the accelerated degree program may be eligible for *RA/TA* appointments at the discretion of their department. Undergraduate students are eligible, under the normal rules of appointment or eligibility, for *RA/TA* appointments, scholarships, fellowships or other types of support or recognition which would normally be available to undergraduate students. Likewise, students who have been approved and admitted to graduate student status will be eligible for *RA/TA* appointments, scholarships, fellowships or other types of support or recognition which would normally be available to graduate student status will be eligible for *RA/TA* appointments, scholarships, fellowships or other types of support or recognition which would normally be available to graduate students.

Changes to Credit Hours for Transfer

Section E: Transfer Credits

Transfer credits may be applied to a graduate degree only with the approval of the program director. Each master's program will establish, with the concurrence of the GEC, the maximum number of semester hours (not to exceed 30% of the required credits) that may be transferred from another accredited institution and applied toward its graduate degree. Additional transfer credits for doctoral programs may be allowed at the discretion of the program director, with approval of the Graduate School Dean. The following provisions will apply:

- 1. All transfer courses must have a minimum grade of B or above (3.0 on a 4.0 scale).
- 2. Programs may require that credit will not be accepted for transfer until the student has established a satisfactory academic record at this university.
- 3. All work accepted for transfer must have been completed within the approved degree time limit or must be validated and approved by program faculty.
- 4. Courses applied towards an awarded master's degree or bachelor's degree may not be used towards another master's degree in progress. Courses applied to a master's degree may be used towards the doctorate degree with the approval of the program faculty and graduate school.
- 5. Courses applied towards a UCCS graduate certificate program may be used towards a master's degree so long as these courses meet transfer credit policy.
- 6. Requests for transfer of credit must be made on the form specified for transfer of credit and an official transcript of course credit must accompany the requests or be on record in Admissions and Records.
- 7. Master's degree students must submit transfer requests to the program director by the deadline determined by the program.
- 8. Doctoral degree students must submit transfer requests to the Graduate School before submitting the application for admission to candidacy.
- Graduate level credits earned while an undergraduate at another institution may be transferred to the Graduate School upon approval of the program faculty and graduate school as long as the credits did not count towards the undergraduate degree.
- 10. Students transferring in credits from international institutions to count towards degree requirements must have courses evaluated by a professional service to determine the work is graduate level, equivalency of grades and number of credits. Please visit the Transfer office website at https://transfer.uccs.edu/contact/fag (See Office of Admissions and Records for suggested service providers). If UCCS has a contracted agreement with an international institution, course evaluation will not be required.

Section F: Credit Earned at the University of Colorado Colorado Springs before Admission to the Program

- Seniors at the University of Colorado Colorado Springs <u>students</u> may transfer up to nine semester hours of courseworkgraduate credit hours taken as an <u>undergraduate with department and graduate school approval</u>, provided such work meets the following requirements:
 - a. <u>Meets the program requirements for number of accepted transfer hours,</u> not to exceed 30% of the program credit hour requirement.
 - b. Completed with a grade of B or above in the senior year at this University
 - bc. Falls within the time limit for the completion of the graduate degree
 - ed. Does not apply toward course or credit requirements of the bachelor's degree
 - de. Is approved by the program director prior to beginning the graduate degree
- 2. Courses must be at the 0500/5000 level or higher and taught by a faculty member with an appointment to the Graduate Faculty.
- 3. Graduate coursework must be substantially different than undergraduate coursework, with the graduate coursework demonstrating more rigor and exceeding undergraduate course expectations.
- Completion of the same graduate and undergraduate courses (e.g., course cross listed at 4000 and 5000 level) will not be snot allowed.
- 5. Retroactive changing of undergraduate credit to graduate credit is not allowed.
- 6. Credits earned as an unclassified a nondegree student at the University of Colorado Colorado Springs may be applied to a graduate degree only with the approval of the program director. Each course must have a grade of B of better to be transferred in towards the graduate degree. Each program will determine the maximum number of credits as an unclassified nondegree student, not to exceed 12-30% of program credit hourssemester hours. If a program would like to transfer in more than 12-30% of program credite hours, they can-may request an exemption through the Graduate School.
- 7. The total number of credit hours from any source (transfer from another institution or taken from UCCS as undergraduate or nondegree student) cannot exceed 30% of total credit hours of degree program. Exceptions are certificates which are fully contained within a degree and can be taken by nondegree students.

Section G: Credit Earned at Other University of Colorado Campuses

Programs may accept graduate credits earned at other campuses of the University of Colorado. Refer to the program/department/school/college for each programs' specific policy on other University of Colorado campus credit transfers.

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Intercampus Enrollment: https://registrar.uccs.edu/intercampus-enrollment

Changes to Section D: Probation and Dismissal

 Student Ethics: Students are expected to adhere to the highest codes of personal and professional ethics, as set forth by the University of Colorado Colorado Springs, which appear in the University of Colorado Colorado Springs Student Academic Ethics Code and the Student Conduct expectations. Students who do not meet these standards may be dismissed from the Graduate School Dean upon recommendation of the program director and college/school dean of the student's graduate program. A student may appeal such action under the provisions of Article V.

Change to Dissertation Credits

Ph.D. Doctoral Dissertation Credit Hour Requirements

- 1. Dissertation credits are expected to be taken when a student is working on the dissertation project.
- A doctoral student may take no more than 24-80% of total required dissertation credits up until the semester in which the appropriate examination is passed and student is considered a candidate for degree. The student must take at least 1550-59% of total required dissertation credits in the semesters after the appropriate examination is passed.
- Following successful completion of the appropriate doctoral examination, a student may register for 1 to 10 units of dissertation credit in a semester (no more than 7 credits hours in summer) until the requirements for the degree are completed.
- 4. A student must be registered for at least 1 dissertation credit or have the *candidate for degree* status during the semester (or summer session) in which the dissertation defense is held.
- Students must follow program and departmental policies and procedures for maintaining satisfactory progress through the program. Departments and programs should communicate these procedures and standards to students.
- 6. A doctoral student is typically expected to be enrolled continuously; however, students are considered inactive after 12 months of no enrollment has occurred. If a student is classified as inactive, they will need to follow the procedures in Article III, Section D: Applications by Former Students according to their program's requirements.

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Section K: Time Limits for Completion of Degrees and Certificates

Master's Degree

Although students are normally expected to complete a master's degree in one to three years, master's degree students have six years, from the date of the start of course work, to complete all degree requirements (which includes filing the thesis if Plan I is followed). A student who fails to complete the degree in the six-year period must file a petition for extension with the program director and have it approved by the Graduate School Dean. The petition, giving reasons why the student should be allowed to continue in the program, must be endorsed by the program director. The program director must approve the application of any course to the degree that was taken more than six years prior to the semester of graduation, and all such courses must be validated by special examination. Courses that have been validated will be eligible for use towards graduation for two years. If the student takes longer than that from time of validation to complete the degree, a new course validation will be required.

Doctoral Degree

Doctoral students are normally expected to complete all degree requirements within nine years from the date of the start of coursework in the doctoral program. A student who fails to complete the degree in the nine years must file a petition for extension with the program director and have it approved by the Graduate School Dean. The petition, giving reasons why the student should be allowed to continue in the program, must be endorsed by the program director or by three members of the student's dissertation advisory committee. If the Graduate School Dean approves, the student may continue studies for an additional year. If the Graduate School Dean does not approve the request, the college/school dean, with the concurrence of the program director, may dismiss the student from the program. If the Graduate School Dean and the program director do not agree on whether a student should be continued in the program, the Graduate Executive Committee shall make the final decision. If the extension is granted, any coursework that is over nine years must be validated by special examination prior to graduation. Courses that have been validated will be eligible for use towards graduation for two years. If the student takes longer than that from time of validation to complete the degree, a new course validation will be required.

Financial Aid Eligible Certificates

Programs can set timelines for completion of stand-alone certificates. Although students are normally expected to complete a certificate in one to two years, certificate students have six years, from the date of the start of course work, to complete all certificate requirements. After six years, students will need to validate coursework for certificates follow program requirements. Programs may set shorter timelines.

Graduate School Funding Opportunities 2024-2025

These are brief summaries of funding available from the graduate school. Please read specific details for each opportunity to understand application processes (sent to program directors or <u>on webpage</u>). Programs will receive detailed information about awards from Graduate School. Awards may require nomination by program, student direct application, or college/department awarding and notification to graduate school. All students should be encouraged to complete the FAFSA as there are need-based funding opportunities. This document may be shared with faculty and students.

Programs Nominate Students

First Year Graduate Student Research Fellowship (\$6,000/year; 3-10 given per year) A competitive award sponsored by the Graduate School and the Center for Student Research given to outstanding students from any graduate program. Students are expected to be engaged in research/scholarship with a faculty member. These are **only for incoming graduate students (entering Summer or Fall semester**), including international students (current students can directly apply for fellowship; see below). <u>Students are nominated by the program</u>. A campus committee will select awardees. Nomination packets are **due by the 3rd Wednesday in February** to the Graduate School and awards made by April 1 for the following academic year (Fall start). Awardees are part of the Graduate Research Academy which provides professional development activities. Members of the GRA are required to participate in two activities during the year of the award.

Programs Award and Notify Graduate School of Awardees

Graduate Out-of-State Scholarship (for recruitment of new students) (\$6,000/year; 20 given per year)

This is a merit-based scholarship for first year out-of-state graduate students (starting Summer or Fall semester), including international students. Students must be classified as paying full nonresident tuition (no other discounts can apply but students can receive other types of scholarships and grants), have a minimum undergraduate GPA of 3.33, and be enrolled full time. <u>These are recruitment scholarships and are given to programs directly to award.</u> Qualified students are considered by their program, and the program makes awards. There is no separate application process (except if department sets additional criteria or process). Awardees must be selected **by the second Monday in May** or funds returned to graduate school to be dispersed.

Graduate School Tuition Matching Grant (up to \$8,000 per year; number depends on specific funding requests—approximately 50-100)

Program must provide matching funds (i.e., teaching assistantship, research assistantship, or funding related to service/internship that is directly related to educational program). Colleges/departments/programs will be told how much funding they have by the Graduate School in December. Colleges/departments/programs select and notify students about awards as part of the recruitment/retention process. The program must inform the graduate school of their awardees by **the first Monday in May**. Tuition matching grants are awarded through financial aid; departmental matching funds are paid through normal departmental processes. Students must have GPA of 3.0 or higher and be enrolled full time.

Graduate Dean Doctoral Award (for any PhD student)

This is PhD student funding to support the R2 mission. Programs will need to fund a required work component. Fund amounts are provided to colleges to award to PhD students. Awards are made through financial aid. Work component award is through the department/college. This tuition award is dependent on students having a work award from the college/department. Colleges are informed of available funding in December and colleges/programs must inform the Graduate School of awards **by May 15**.

Students Apply for Awards

Students apply directly through the <u>UCCS Financial Aid Scholarship portal</u> which opens Jan 2 and applications are due by March 1. Scholarships are awarded for 2024-2025 academic year. Students who are admitted can access the scholarship portal. They do not need to accept the admission offer before applying for scholarships.

NOTE: This is a later time for the scholarship portal to open but it closes at same time as in past.

Continuing Graduate Student Research Fellowship (\$6,000/year; 5-10 given per year)

A competitive award sponsored by the Graduate School and the Center for Student Research given to outstanding students, including international students, from any graduate program. Students must be enrolled in a graduate program at time of application (incoming students can be nominated for 1st year Graduate Research Fellowship by the program; see above). Students are expected to be engaged in research/scholarship with a faculty member. A campus committee will select awardees. <u>Students apply directly through the UCCS scholarship</u> <u>webpage and must complete an essay as part of the application and submit a faculty</u> <u>recommendation letter. The scholarship page for information</u>]. Awardees are part of the Graduate Research Academy which provides professional development activities. Members of the GRA are required to participate in two activities during the year of the award.

Graduate Opportunity Scholarship (\$5,000-\$25,000/year; 1-6 given per year)

A competitive, need-based scholarship given to incoming graduate students (starting at UCCS during Spring, Summer or Fall 2024 semesters) who bring diverse perspectives to UCCS. Students must have a minimum 3.0 undergraduate GPA and demonstrate financial need by completing the FAFSA and submitting the application no later than **March 1**. <u>Students apply</u> <u>directly through the UCCS scholarship webpage and must complete an essay as part of the application. The scholarship portal opens January 2 and applications are due by March 1 (see Financial Aid Scholarship page for information)</u>. Students must have been admitted to the program to be able to access the UCCS Scholarship page (contact the Graduate School if there are issues). International students are not eligible. Awards will be announced in early April for the following academic year.

Graduate School Mentored Doctoral Fellowship (\$20,000-\$25,000/year awards; 4-5 given yearly)

A competitive merit award sponsored by the Graduate School that supports the professional development of doctoral students. Awards are for outstanding advanced doctoral

students who are engaged in mentored professional development activities beyond coursework and dissertation research (e.g., additional research, teaching, clinic work, practicum, etc.). International students are eligible. <u>Students apply directly through the UCCS scholarship</u> <u>webpage and must complete an essay as part of the application. The scholarship portal opens</u> <u>January 2 and applications are due by March 1 (see Financial Aid Scholarship page for information)</u>.

Graduate School Travel Award (\$500/student; 40-50 given yearly)

These are allocated to help offset travel expenses for graduate students that travel to conferences that will further their research efforts and the research efforts of the University. It can also be used for students who wish to travel to trainings and workshops that will contribute to their professional development. In times of limited funding, priority will be given to students who are presenting at conferences. Awards may come after travel is completed. Only currently enrolled graduate students in degree-seeking programs are eligible to apply; at time of travel, student must be enrolled at UCCS (or in summer between semesters). Students submit application electronically, see <u>Graduate School website</u> for deadlines and other requirements. **Travel award application opens twice a year.**

Other awards offered through financial aid:

All available institutional awards for graduate students can be found on the <u>Graduate</u> <u>School webpage under financial resources.</u>

Colorado Graduate Grant: need based, Colorado residents in STEM fields. Must complete FAFSA by March 1. Awards made by Financial Aid Office in Fall.

UCCS Tuition Grant: need based, Colorado residents in STEM fields. Must complete FAFSA by March 1. Awards made by Financial Aid Office in Fall.

Lind Scholarship: need based; all US domestic graduate students eligible. Must complete FAFSA by March 1. <u>Students apply directly through the UCCS scholarship webpage and must</u> <u>complete an essay as part of the application. The scholarship portal opens January 2 and all</u> <u>applications are due by March 1 (see Financial Aid Scholarship page for information)</u>.

UCCS Family Development Center Scholarship: Childcare scholarships to the UCCS FDC may be available. Students can call (719) 255-3483 to learn more.

Scholarship portal opens January 2 (this is later than normal). Students must be admitted in order to review and apply for scholarships (they do not need to have accepted the admission offer prior to applying for scholarships). Most institutional aid requires that students are admitted well before March 1 scholarship deadline. After this date, students cannot complete applications and scholarship ship money is typically gone by the time late students are admitted.

WHO WE ARE:

WHAT WE DO:

SUSAN ELDRIDGE GRADUATE RECRUITMENT OPERATIONS PROGRAM MANAGER Seldrid3@uccs.edu



RECRUITME

UCCS GRADUATE SCHOOL

DEANNA JOHNSON GRADUATE RECRUITMENT SPECIALIST Djohns42@uccs.edu

- Recruit for all UCCS graduate programs through on-the-ground recruiting (fairs and events) and digital communications (email marketing campaigns, social media, emails, etc).
- Work with students from the "Inquiry"/"Prospect" stage (where a student requests information or we meet them at a fair) to the "Applicant" stage (where students apply to the university).
- After students are admitted, we encourage students to accept their intent to enroll and to register for classes.
- During these various stages, Susan and Dee work with students to ensure their questions are answered and application issues are addressed.
- We also work to ensure students are being connect with departments for recruitment purposes and assist departments with recruitment efforts.

WHERE WE RECRUIT

Colorado



- Attend recruitment fairs for Colorado schools.
- Partner with local organizations for recruitment purposes.





- Focus on WRGP Western Regional States States/Areas with large
- Military populations. Attend recruiting fairs in

a variety of U.S. States for many different industries (i.e. Engineering) and focuses (i.e. Diversity) On Campus



- Hosts information sessions virtually and inperson for current UCCS students and other student related events.
- Attend on campus career and internship fairs hosted by colleges.
- On-campus marketing, such as commode chronicles and Mountain Lion Connect.





- Works in partnership with International Affairs to ensure smooth process for International Student Admissions and transition into matriculation.
- Assists international students with questions and concerns.
- Helps to process I-20 documents (Amy Shank).

HOW WE CAN HELP:

- Classroom visits and presentations for UCCS classes
- Partner in planning on-campus events for current UCCS students
- Attend industry and focus related fairs (if able) to help recruit students for your programs
- Assist departments with recruitment communications and brainstorm recruitment efforts
- Post events to our social media accounts to help advertise for your events
- Plus SO. MUCH. MORE! Email us if you have ideas or need help!



ARE YOU READY TO SHOWCASE YOUR GRADUATE RESEARCH IN AN ENGAGING WAY?

1 SLIDE • 3 MINUTES RESEARCH AWARDS GIVEN

\$750 - \$500 - \$250

JANUARY 29TH & FEBRUARY 1ST, 2024



Priority Registration DEC 15 Final Registration JAN 16

Scan here or visit: https://bit.ly/3UMHhrH



SPRING 2024

Graduate School Welcome Reception

A great opportunity to connect with other students, staff, and faculty from your program, and to learn about campus resources available to graduate students! Dinner will be provided.

> Tuesday, January 9, 2024 5:00 - 7:00 p.m. Kettle Creek

Next to the Roaring Fork Dining Hall in Alpine Village *Free Parking in Alpine Garage*

RSVP by January 2nd THRU MOUNTAIN LION CONNECT! Questions? 719-255-3567 or gradinfo@uccs.edu