

The 2024 Strategic Plan of the College of Information and Cyberspace

Our Roadmap to CIC's Future



College of Information and Cyberspace
National Defense University
Ft. Lesley J. McNair
Washington, D.C.



A Brief History

The College of Information and Cyberspace (CIC) traces its origin to the establishment of the Department of Defense Computer Institute (DODCI) in 1964, which was focused on providing technical courses on the use of computer technology in support of the Department of Defense (DOD) mission. In 1982, DODCI became part of the National Defense University and in 1990, was renamed the Information Resources Management College (IRMC) providing information systems and leadership courses. In recognition of its robust distance learning course offerings, the College was later rebranded as the “iCollege”. In 2017, IRMC became the College of Information and Cyberspace with an expanded mandate to prepare military and civilian leaders to address the cyber and information challenges our nation faces. CIC is proud to offer robust graduate education programs leading to the award of the Master of Science degree in Strategic Information and Cyberspace Studies and Graduate Certificates in areas such as Cyber Security, Cyber Leadership, Chief Information Officer, Chief Data Officer, and Chief Financial Officer.



NDU's Marshall Hall houses the College of Information and Cyberspace on Ft. McNair in Washington, D.C.

A Message from our Chancellor



NATIONAL DEFENSE UNIVERSITY
COLLEGE OF INFORMATION AND CYBERSPACE
WASHINGTON, D.C. 20319-5066

August 14, 2024

Office of the Chancellor

Dear CIC Community,

With great enthusiasm, I present to you the 2024 College of Information and Cyberspace (CIC) Strategic Plan – our roadmap that embodies our unwavering commitment to fulfilling the mission of our College over the next five years. As we proudly celebrate CIC's sixtieth anniversary and reflect on our rich history and enduring accomplishments, it is fitting and imperative to declare our vision and goals for the future. This strategic plan is more than just a document. It is our collective vision for the transformative journey ahead.

Through this plan, we will enable unprecedented success for our students, alumni, and stakeholders. We will enhance our College's operational excellence and build the team our mission and our students require. By realizing the vision outlined in this plan, we will establish ourselves as the leader in education, research, and collaboration in global cyber and information strategy, positioned at the nexus of government and academia.

Serving as the Chancellor of the College of Information and Cyberspace has been the greatest honor of my career. CIC's accomplishments over the last sixty years are a testament to the strength, vision, and purpose that drive our mission. As we look to the future, the successful implementation of this Plan's objectives will ensure that America and its allies are equipped with the joint warfighters, national security leaders, and cyber workforce necessary to lead, advise, and advance national and global security in the cyber domain and information environment.

Thank you for your unwavering dedication and contributions to our College, our mission, and national security.

Sincerely,

A handwritten signature in blue ink that reads "Cassandra C. Lewis".

CASSANDRA C. LEWIS, PhD

Chancellor

College of Information and Cyberspace



60th Anniversary Highlights

Sixty years after its founding, the College of Information and Cyberspace is strong, its mission more vital than ever, and its momentum is surging. Our College is one team – leadership, faculty, staff, and stakeholders. Together, we achieve leadership and excellence in education for national security strategy in the cyber domain and global information environment. In so doing, we are innovative, dedicated, focused, and forward-looking. CIC will lead in education, research, and collaboration in global information and cyber strategy as the nexus of government and academia.

CIC has established a record of success. CIC has built on the progress of the past and continues to adapt and innovate. Key recent accomplishments include the following:

- We have established the nation's Joint Professional Military Education (JPME) Level 2 program in cyber and information strategy, producing leaders with skills critical for achieving victory and advancing vital national security interests in the global cyber domain and information environment for the United States and its allies, graduating a total of 336 national security professionals through 2024, 158 from the Uniformed services, 93 from the DOD and interagency civilian service, and 85 from our allies and partners.
- Our Master of Science in Strategic Information and Cyberspace studies is offered in two formats, a full-time in-residence program that grants JPME Level 2 and a part-time, program delivered in person and online. Additionally, CIC's graduate certificates provide senior project and program managers with the knowledge, skills, and abilities required for the cyber workforce to achieve leadership excellence. Since 2014, 9,800 students from across the Federal government have enrolled in one or more of ten (10) different CIC program offerings. Since 2015, 378 have completed the Distance Learning Cyber Workforce version of our Master's Degree and 1,056 students have completed a CIC Certificate program.
- CIC is home to the Cyber and CIO Leadership Development Programs, its flagship resident programs for rising senior leaders and senior managers in the cyber and CIO communities, responsible for promoting and attaining national and international security goals through the strategic use of information and information technology as identified in the DOD CIO competencies.
- The Grace Hopper Award has become the national security community's leading recognition for distinguished individuals who are thought leaders advancing the fields of information and cyberspace in the national security community.
- CIC was designated the Administrative Chair for UC2, the DOD University Consortium for Cybersecurity, in the 2022 National Defense Authorization Act. UC2 is a new organization that serves as a bridge between higher education institutions and DOD. UC2 solicits innovation from academia to support DOD priorities through activities that increase communication, collaboration, and access to research, integrating innovation with the cyber workforce. The Consortium ensures that we are ready and learning, set to benefit immediately from new advances across disciplines, and better prepared for change on the horizon.

60th Anniversary Highlights



- CIC has been designated a National Center of Academic Excellence in Cybersecurity for Cyber Defense, establishing the school's distinction among educational institutions dedicated to excellence in cybersecurity education, academic advancement, and institutional practices in cybersecurity.
- CIC Faculty have won countless awards and recognitions, including but not limited to the French National Order of Merit, and NATO's Serge Lazareff Prize.
- Every year, CIC hosts Cyber Beacon, the college's flagship conference. This conference brings together leaders and experts from the public and private sectors to discuss today's most pressing national security challenges related to cyberspace. It has maintained its critical importance throughout the college's evolution and resulted in significant discourse in the cyberspace community.
- CIC is a national thought leader in cyber and information strategy. Our faculty produces leading publications and presentations, changing and advancing how we comprehend and formulate cyber and information strategy for the national interest. They guide and consult on the formulation of essential strategic plans and policies. They foster innovation and collaboration across the NDU campus.



Students of the JPME Class of 2024



Executive Summary

The 2024 CIC Strategic Plan arrives during a generational challenge to the international order. Regional and global threats by malign actors in the information environment and cyberspace domains are increasing as strategic competition becomes more heated. Consequently, the next generation of warfighters and national security leaders must possess unique knowledge and abilities to create policy and strategy to respond to the nation's most pressing and complex security challenges, foreign and domestic. As the College of Information and Cyberspace (CIC) celebrates its 60th anniversary, we stand ready to provide many more decades of excellence in educating joint warfighters and national security professionals.

The 2024 CIC Strategic Plan incorporates guidance from and is nested within the National Defense University's strategic and implementation plans published in 2022 and 2023, respectively. It is also grounded in stakeholder and alumni feedback to ensure its relevance and value. The Plan defines CIC's vision, mission, values, guiding principles, and resulting goals, objectives, measures, and outcomes.

CIC's vision is to be the leader in education, research, and collaboration in global cyber and information strategy at the nexus of government and academia. Thus, CIC's mission is to educate joint warfighters, national security leaders, and the cyber workforce on the cyber domain and information environment to lead, advise, and advance national and global security. Under the aegis of this Vision and Mission, this Plan defines the following five Goals for the College organized under three lines of effort:

Enable Student, Alumni and Stakeholder Success

- Goal 1 – Deliver The Curriculum Our Students and Mission Demands
- Goal 2 – Serve Our Students and Alumni with Excellence

Improve the College

- Goal 3 – Ensure Accountability
- Goal 4 – Improve Efficiency and Effectiveness

Build Our Team

- Goal 5 – Attain the Resources, Team Members and Administration Appropriate for the Nation's Leader for Education, Research, and Collaboration in Global Information and Cyber Strategy

A STRONG FOUNDATION, SEIZING MOMENTUM – DEVELOPMENT OF THE 2024 CIC STRATEGIC PLAN

We developed this Strategic Plan to:

- Define a clear course of action for our future, to guide resource allocation and policy priorities;
- Build upon our strong foundation of support and our mandate from the NDU President, Congress, the Joint Staff, DOD CIO, and vital interagency stakeholders, alumni and students; and
- Celebrate our success upon the 60th Anniversary of the College's founding.

We built this Plan to express how we will capitalize on our momentum and serve our Mission and stakeholders over the next five (5) years. It is grounded, focused, evidence-based, deliberate, and motivated by our shared vision as one team. To develop this 2024 CIC Strategic Plan, we assessed our strategic environment following our Vision, Mission, and Values. This enabled us to identify Guiding Principles, which we then used to identify the Plan's resulting goals and objectives. The measures and outcomes of each objective will be used to steer this Plan's implementation. Our goals align to the three lines of effort established in the 2024 NDU Strategic Plan, and its associated Implementation Plan.

This Plan's Goals and Objectives are prioritized based on CIC's Top Priority—delivering for our students - the essential foundation of our Mission.



2024 CIC Faculty and Staff Picture



Strategic Context

We establish CIC's strategic context by identifying our vision, mission, values, and guiding principles as follows:

Vision

CIC's vision is to be the leader in education, research, and collaboration in global cyber and information strategy at the nexus of government and academia.

CIC's vision is in alignment with NDU's vision: "NDU will create strategic advantage by developing joint warfighters and other national security leaders and forging relationships through whole-of-nations and whole-of-government educational programs, research, and engagement."

Mission

CIC's mission is to educate joint warfighters, national security leaders, and the cyber workforce on the cyber domain and information environment to lead, advise, and advance national and global security.

CIC's mission is in alignment with NDU's mission: "NDU educates joint warfighters and other national security leaders in critical thinking and the creative application of military power to inform national strategy and globally integrated operations, under conditions of disruptive change, in order to prevail in war, peace, and competition."

Values

CIC's strategic plan is nested within NDU's strategic plan and its statement of values. CIC's core values build upon NDU's values and are foundational to our unique mission of establishing the highest possible levels of learning, research, and educational support for our students and alumni, reflecting the unique career challenges and responsibilities of information and strategy professionals. CIC's values endure through changes in national security policies, education modalities, and classroom discussion topics.

Innovation: CIC's curriculum focuses on addressing emerging risks and the latest advances, initiatives, and activities in cyberspace, information, and disruptive technology in the global cyber domain and information environment. Our commitment to innovation extends to ensuring CIC is at the leading edge of academic curriculum development and teaching methods.

Unity: In keeping with NDU's values, we achieve excellence through strong engagement and lasting relationships with our stakeholders. The College draws its leadership and vision in the national security environment from the varied ideas, backgrounds, and perspectives of its faculty, staff, and students and those of the interagency and international partners.

Strategic Context



Academic Excellence: Building on NDU's value of academic excellence and commitment to supporting our alumni. CIC is devoted to intellectually challenging academic programs, products and outcomes. The college espouses the highest standards of academic excellence and quality education in teaching, research, and development. The college supports continued alumni success as it prepares national security leaders to understand and overcome future threats to the U.S. and its allies in the global security environment.

Academic Freedom: CIC builds upon the value of academic freedom expressed in the NDU Strategic Plan and emphasizes its critical importance in promoting innovation and discourse vital to protecting Constitutional freedoms, human rights, and national security.

Professional Integrity: CIC builds upon this value expressed in the NDU Strategic Plan. CIC is committed to upholding the highest standards of professional integrity for military and government professionals, respecting civil-military relations and the values reflected in the oaths to the U.S. Constitution taken by civilian and military U.S. government employees. CIC upholds an ethos of professional excellence for military and civilian leaders in all we do.

The figure below illustrates the alignment of our foundational Values, our Mission, and the Vision that we will achieve.

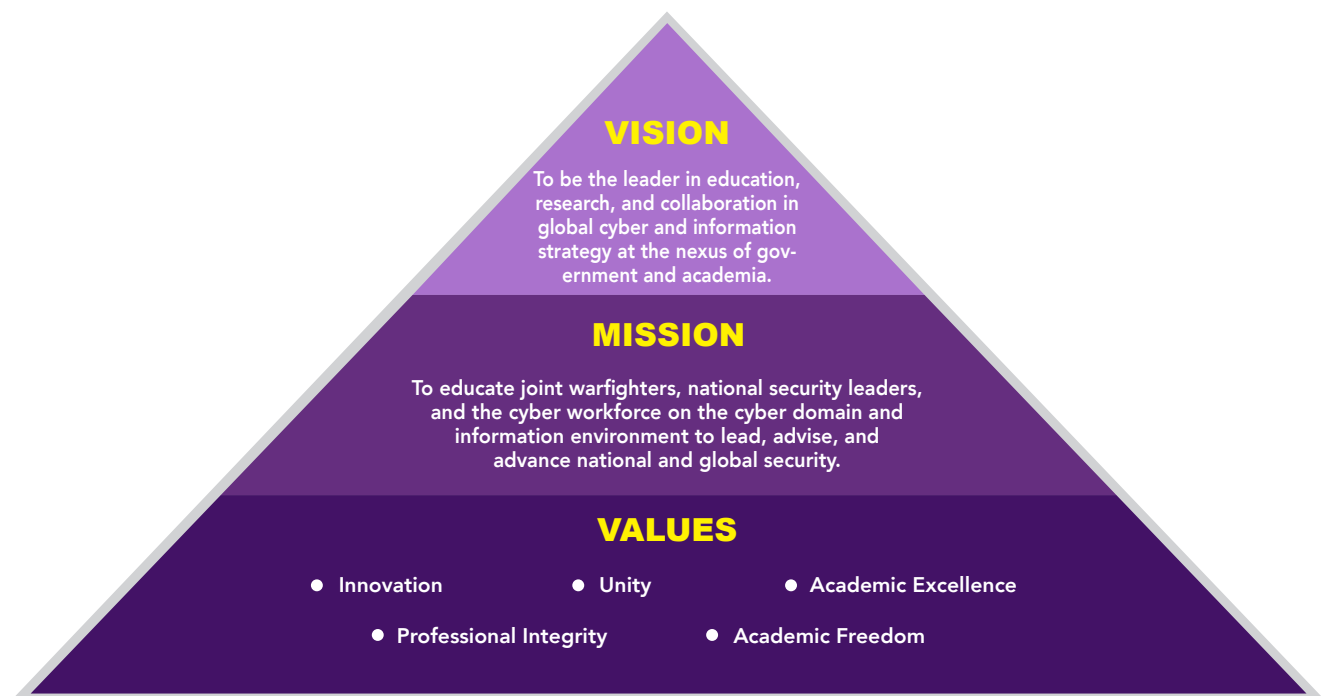


Figure 1. CIC's Vision, Mission and Values Pyramid



Strategic Context

The oval shown below depicts CIC's strategic environment in highlighting our three core focus areas: Teaching, Engagement, and Research, demonstrating the importance of our Students in the center, accounting for the interests of our Alumni and Stakeholders, and emphasizing that our Values encompass all that we do.

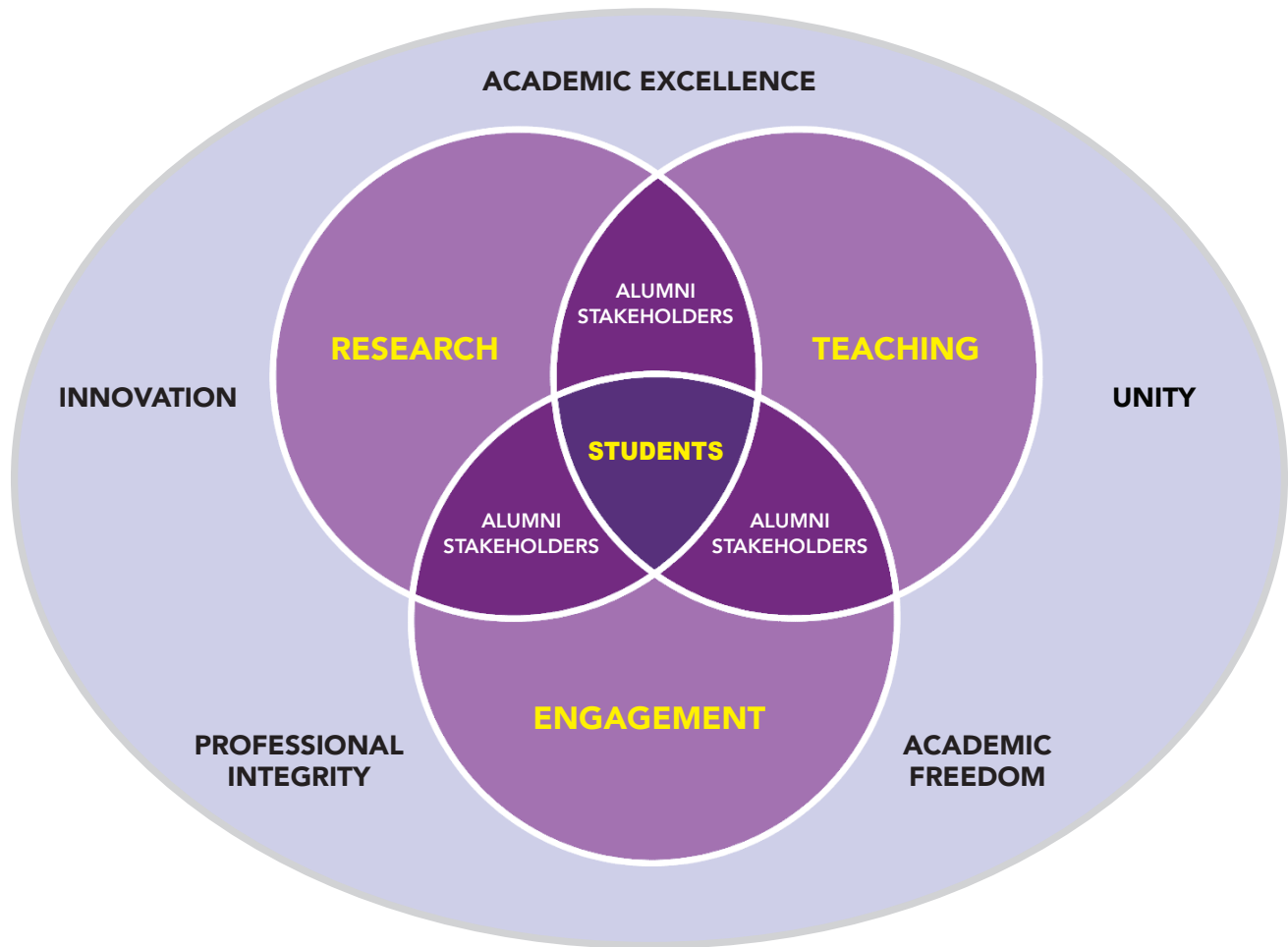


Figure 2. An Oval presenting the Strategic Environment of CIC Academic Programs

Strategic Context



GUIDING PRINCIPLES FOR THE 2024 CIC STRATEGIC PLAN

The following principles guided the development of this strategic plan:

Principle One - Our students are at the heart of our mission.

Turning CIC students into successful and victorious joint warfighters and national security professionals for national security strategy, in peace, competition and war, is the core mission of CIC. CIC's students and alumni are the College's representatives of our institutional stakeholders, but they are also stakeholders themselves. They are ultimately our product, without whom CIC would not exist. Their success as senior leaders is an essential measure of our effectiveness. **This first principle is the guiding light for this plan, and the prioritization of its Goals and Objectives.**

Principle Two - This Plan nests within the NDU Strategic Plan and its Implementation Plan and is tailored to the needs of our stakeholders.

CIC is unique among NDU's colleges because of the two distinct populations it serves. First, under a mandate from the DOD Cyberspace Workforce Instruction (CJSI 1800.01F), CIC's 10-month, in-residence Joint Professional Military Education (JPME II) Master's degree program serves senior (O-5 and above) U.S. military officials and their civilian counterparts (GS-15), in addition to senior military officials from U.S. partner and ally nations. The "Joint Environment" of the in-residence program is critical to their education. The Joint Chiefs of Staff Chairman oversees NDU and in turn, CIC's Joint Professional Military Education Program. In addition, CIC also has a historic mandate to educate the Cyber Workforce. This vital mandate is driven by the DOD CIO and reaffirmed through the 2015 DOD Cyberspace Strategy (April 2015) and DOD Cyberspace Workforce Management Directive (DODD 8140.01). The College's Cyber Workforce Programs and the University Consortium for Cybersecurity (UC2) are included in the newly-created DOD Cyber Academic Engagement Office (CAEO) per section 1531 of the 2024 National Defense Authorization Act.

Principle Three - This Plan prioritizes creating a supportive, meaningful, and trustful organizational culture while advancing faculty and staff professional development, scholarship, and thought leadership in accordance with our Mission, the NDU Strategic Plan, and the needs of our students and stakeholders.

Our faculty and staff are the backbone of the institution. Faculty and staff work together as one team to ensure excellence in all of CIC's operations. Staff are vital to every function of the College. They ensure that student enrollment, course registration, special events, and all operations are managed expertly and run smoothly. Faculty are the primary point of contact with the students, working to teach, mentor, and develop national security strategists far beyond the classroom. Our faculty and staff work tirelessly to update our ongoing curricular efforts, ensuring that our students consume, debate, and produce cutting-edge, career-relevant research and ideas, and involving students in our research efforts. Finally, the CIC Chancellor, leadership, faculty, and staff serve as ambassadors of the college and as CIC's liaisons to our alumni and stakeholders. It is only by fostering an organizational climate of Support, meaning, and trust that CIC will attract, retain and advance the best and highest functioning team of faculty, staff and administrators.



Strategic Context

Principle Four - This Plan defines clear priorities for our College's curriculum and operations, channeled by the integration of Teaching, Research, and Engagement for our faculty and staff.

Teaching, Research, Engagement, Service, and Accountability, together known as TRESA, define faculty and staff responsibilities at the National Defense University. Teaching, Research, and Engagement are complementary functions designed to serve students, stakeholders, and the DOD by ensuring our students are involved in producing, consuming, and analyzing cutting-edge research in the rapidly developing fields of Information and Cyberspace.

Principle Five - Our Plan has well-defined goals, objectives, measures, and outcomes that advance our core values.

The core of this Plan is a series of goals with supporting objectives, measures, and outcomes. The Goals define the basis and aspiration for the ensuing elements. Objectives state our intended actions to pursue the goal. The Measures define how we will assess whether our objectives are being achieved. Our Outcomes define the real-world value and benefits of achieving our goals, objectives, and measures.

Principle Six - Our whole team – leadership, faculty and staff - will be accountable to this Plan

CIC's leadership, including our Chancellor and Deans, ensures CIC's alignment to the priorities of the Chairman of the Joint Chiefs of Staff, DOD Chief Information Officer, and NDU President, with the full support our faculty and staff team. CIC is committed to achieving our mission and meeting the needs of our stakeholders and students according to this Plan. The Plan's mechanisms of accountability and self-assessment will ensure that we realize our vision while adapting effectively to changing circumstances and mission priorities.



Students from the Fall 2023 Cyber Leadership Development Program

Goals, Objectives, Measures, and Outcomes



This section presents our Goals, Objectives, Measures, and Outcomes organized under our three lines of effort: Enable Student, Alumni, and Stakeholder Success; Improve the College; and Build our Team.

ENABLE STUDENT, ALUMNI, AND STAKEHOLDER SUCCESS

Goal 1: Deliver The Curriculum Our Students and Mission Demand

Deliver a Cutting-edge, Rigorous, and Scholarly Curriculum that Meets the Demands of our Mission, Leadership, and Stakeholders

Why We Have This Goal – This Goal was developed to recognize that CIC’s priority is delivering the educational programming and services its students require to become successful, victorious joint warfighters and national security professionals in peace, competition, and war. Thus, our first Goal and its associated objectives needed to present the College’s objectives for delivering such curricula and capacity, building and advancing upon its achievements to date.

Goal 1.1: Upgrade and Enhance the CIC Curriculum

Objective 1.1: Conduct a comprehensive review of the CIC curriculum to improve coherence and quality and better meet stakeholder demands.

Measure 1.1: Institutional assessment of PLO achievement demonstrates full PLO achievement. Faculty course assessment reports show increased alignment and coherence of curriculum. Stakeholder surveys report improved alignment between curriculum and needs.

Outcome 1.1: The curriculum is more aligned with expressed stakeholder needs. Students receive a consistent, quality learning experience that better prepares them to be Joint Warfighters and national security leaders.

Goal 1.2: A Continuously Improving CIC Curriculum

Objective 1.2: Deliver a fully upgraded and enhanced CIC curriculum using the most advanced and well-resourced teaching methods, practices, resources and technologies, in alignment with NDU strategic planning, budgeting and programming.

Measure 1.2: Improved, advanced teaching methods, practices, resources, and technologies will be incorporated in full alignment with the CIC curriculum, stakeholder requirements, student demand, and adult education standards and best practices. Increased use of wargaming, research opportunities, and classified case studies or scenarios for strategic contingency planning exercises.

Outcome 1.2: Teaching methods, practices, resources, and technologies match the quality, sophistication, and advancement of the CIC curriculum, while educational resources and equipment contribute to a highly regarded student experience and enable authentic assessment of student readiness for real-world scenarios. A foundation is established to define and justify requirements for a new, dedicated CIC school building.



Goals, Objectives, Measures, and Outcomes

Goal 2: Serve Our Students and Alumni with Excellence

Develop the Learning Environment, Services, and Alumni Network Demanded by Our Students and Required by Our Mission

Why We Have This Goal – Like Goal 1, this Goal was developed in recognition of CIC's leading, guiding priority – our students - delivering the educational programming and services students require to become successful, victorious joint warfighters and national security professionals in peace, competition and war. With this Goal, CIC presents the objectives that must be achieved to implement the curricula developed under Goal 1. The Goal's objectives prescribe the resources, capabilities, services, and social networks that will be required to not only possess the right educational programming but also deliver it and add value to our students' careers and service, both during and after their time with CIC.

Goal 2.1: Build the Learning Environment Our Students Require

Objective 2.1: *Upgrade classroom and learning technologies to deliver a state-of-the-art education experience, including cyber labs and ranges, and facilities for classified instruction through explicit communication of requirements for NDU strategic plan implementation.*

Measure 2.1: **Near Term** - Completed assessment of improved classroom technology needs within 6-12 months of publication of this plan. CIC's completion of cyber lab and cyber range requirements is in accordance with the NDU Strategic Plan. Delivery and implementation of improved classroom technology according to CIC and NDU requirements. Train faculty and staff on new technology.

Long-term - CIC defines requirements, prepares a budget justification, and then seeks support from stakeholders for the approval and construction of a dedicated CIC school building.

Outcome 2.1: Student, alumni, and stakeholder surveys reflect improved student learning experience and improved support to stakeholders and alumni.

Goal 2.2: Continue to Advance Efficient, Effective, and Responsive Student Services

Objective 2.2: Implement on-demand access for all CIC students to view admissions applications, course registration information, and degree or certification program completion, leveraging the emerging NDU Connect student services system.

Measure 2.2: Students fully transitioned to on-demand academic services after fully implementing NDU Connect and Blackboard Ultra. Faculty and staff adoption of NDU Connect.

Outcome 2.2: CIC prospective and current students are better informed of their application and program progression throughout their learning experience.

Goals, Objectives, Measures, and Outcomes



Goal 2.3: Meet Demands for Capacity Building Services from Partners and Allies

Objective 2.3: Develop, establish, and implement a CIC business model and associated business process to efficiently and sustainably meet requirements for partner and allied capacity-building educational services, in close coordination with NDU components such as the International Student Management Office.

Measure 2.3: CIC's time and resources are efficiently, effectively, and sustainably aligned with a prioritized set of funded partner and allied capacity-building engagements.

Outcome 2.3: CIC answers the demands of partner institutions and leadership by providing capacity-building educational services to partners and allies.

Goal 2.4: Foster a CIC Alumni Network that Promotes Engagement, Collaboration, Service, and Growth for all Stakeholders

Objective 2.4: Plan and resource opportunities for alumni engagement for networking, continued learning, and improved stakeholder engagement. Define requirements for a CIC alumni association and/or network. Establish a consolidated database of CIC graduates.

Measure 2.4: A staff member dedicated to strategic engagement is in place. An alumni network and database are created and maintained. There are an increased number of strategic alumni events and professional development programs. An annual alumni survey is conducted to track alumni success, career progression, stakeholder demands, and overall benefits of the CIC experience.

Outcome 2.4: Alumni are engaged in advancing the college's overall objectives and benefit from continuing networking opportunities from their educational experience.



CIC sponsored the 2023 Countering Subversive Strategic Competition Conference



Goals, Objectives, Measures, and Outcomes

IMPROVE THE COLLEGE

Goal 3: Ensure Accountability

Capitalize On Growing Institutional Maturity to Establish Mechanisms for Lessons Learned and Accountability to Long-Term Objectives

Why We Have This Goal – Goal 3 was developed to ensure that the College capitalizes on its increasing capacity for institutional research and administration and becomes a learning, adaptive organization – routinely asking how well it is performing against its measures, the degree to which it is achieving its objectives, and where and how it must adapt and change its objectives. Such accountability will be vital under this Plan, for all CIC team members to comprehend how they contribute to the College’s mission, and how effectively and efficiently the College is using its limited resources to achieve its desired outcomes for the nation and its students.

Objective 3.0: Implement a comprehensive CIC assessment process. The Chancellor will maintain overall responsibility for the assessment process; it will be enforced by the Deans and informed by Chairs, faculty, and staff. Sources of standards of assessment may include but not be limited to:

- The Objectives, Measures, and Outcomes established by the CIC Strategic Plan and addressed later in an Implementation Plan (Long Term);
- Measures of Operational Performance and Efficiency as established by the Dean of Administration (Mid-Term);
- Institutional objectives for faculty and staff performance, as established by the Chancellor, Deans, and Chairs (Annual);
- The performance of CIC’s Curriculum, as defined by College Program Learning Outcomes and student, faculty, and staff feedback, as documented by the CIC Director of Institutional Research and Course Directors (Annual and Long- Term)

The College will assess against these sources of standards annually and semi-annually, establishing an assessment committee to collect reports of crucial facts, figures, trends, and case studies sufficient to determine how well and to what degree it is achieving its objectives in these four key areas. After each assessment, we will publish a brief statement of findings to identify our successes and efficiencies, problems for correction, and changes made to objectives to account for new circumstances. Assessment results will inform all college planning and performance aspects, including guidance from the Chancellor and Deans. When conducting its assessment, the College will account for long-term (3+ years out), mid-term (1-3 years out), near-term (annual), and ongoing planning horizons.

Goals, Objectives, Measures, and Outcomes



Measure 3.0:

- Design, approve, and implement the new assessment process within one year of adopting this 2024 CIC Strategic Plan.
- Document efficiencies and successes assessed and achieved through the assessment process.

Outcome 3.0: CIC demonstrates organizational maturity, leadership, and accountability to its strategic objectives to all College team members, NDU leadership, students, and stakeholders by committing to and realizing objectives, measures, and outcomes, while actively addressing organizational concerns.

Goal 4: Improve Efficiency and Effectiveness

Advance Existing Operational Processes to Better Support Our Team

Why We Have This Goal – Goal 4 was crafted to present the objectives necessary for the College to record, institutionalize, and apply the processes and procedures needed to deliver its programs and services. CIC has many processes and procedures in various stages of development and maturity. When achieved, this Goal, its objective, measures, and outcomes will ensure CIC writes them down, routinizes their application, modifies them as required, and provides its faculty and staff with more consistent, predictable, and straightforward ways of doing business.

Objective 4.0: Advance and Enhance Course Lifecycle Management Processes (CLM) for the CIC's credit-bearing programs, including the in-residence and part-time MS degree programs, graduate certificates, and Leadership Development programs. The CLM process will define in detail the specific steps, milestones, and definitions of roles and responsibilities for course administration. The CLM Process will guide curriculum development, justification, approval, implementation, delivery, assessment, and updating. This reference will improve curricular harmonization with PLOs across multiple courses, while also promoting consistent quality and excellence in education through improved faculty preparation, syllabi, facilitation, and student learning.

Measure 4.0:

- CLM developed, approved and implemented under strict project timeline designated by the Deans for all credit-bearing programs within one year of adopting this Strategic Plan.



Goals, Objectives, Measures, and Outcomes

Outcome 4.0:

- CIC course administration is standardized, rigorous, and consistent.
- The quality of student surveys has increased, and the results from student course surveys are more valuable, showing achievement of learning outcomes and general student satisfaction.
- Deans, Chairs, and Faculty observe increased synthesis and harmonization of the curriculum.
- Deans, Chairs, and Faculty and Staff observe increased efficiency and effectiveness of course preparation and delivery.

BUILD OUR TEAM

Goal 5: Attain the Resources, Team Members, and Administration Appropriate for the Nation's Leader for Education, Research, and Collaboration in Global Information and Cyber Strategy

Why We Have This Goal – This Goal was created to ensure that CIC establishes and maintains the Team and resources required to fulfill its mission for its students. Thus, the Goal has three parts, including setting the environment necessary to attract, recruit, retain and develop the best Team of faculty and staff, fully enabling that Team to research, develop, publish and communicate leading scholarship for cyber and information research; and, finally, securing the resources, of all kinds in all appropriate ways, required to achieve the College's mission.

A Supportive, Meaningful, and Trustful Organizational Climate

CIC must recruit, hire, develop, and retain faculty and staff to educate our students, conduct world-class research, and support our alumni. We must analyze our current expertise and assess our strengths and where we must improve to confront today's challenges and overcome future threats. The keys to building and sustaining our team are hiring faculty and staff who support our mission and offering continued opportunities for faculty and staff development while creating a supportive organizational culture that promotes teamwork, trust, and work-life balance to better support workforce satisfaction and ensure employee retention.

Goal 5.1: Innovation to Hire, Recruit, and Retain Faculty and Staff

Goal 5.1.1: Continue to Build a Faculty and Staff Team that Our Mission Requires

Objective 5.1.1: CIC will identify and address gaps in our faculty and staff team's skills, competencies, and expertise, with input from faculty, staff, and stakeholders, concurrent with the related NDU Implementation Plan process.

Goals, Objectives, Measures, and Outcomes



Measure 5.1.1: CIC will develop a report of core competencies and gaps in faculty and staffing skills, competencies, and expertise, and take action to address them through hiring, professional development, and training.

Outcome 5.1.1: CIC will be able to proactively seek to close identified gaps through hiring, professional development, and training and ensure that our faculty and staff are well-prepared and trained to accomplish our mission.

Goal 5.1.2: Targeted, Aggressive, Efficient Faculty and Staff Recruiting and Hiring to Keep Pace with our Complex and Persistently Evolving Environment

Objective 5.1.2: Review CIC hiring processes to: 1) identify and eliminate delays and chokepoints; 2) identify ways to improve and streamline the process with the support of NDU human resource directorate.

Measure 5.1.2: Causes for delays and chokepoints in the hiring process are identified and addressed leading to more efficient and effective hiring processes in the future.

Outcome 5.1.2: Gaps in hiring new faculty and staff will be reduced, faculty and staff availability and quality of life considerations will be improved, and the consistency of education and administration for students will be enhanced.

Goal 5.1.3: A More Complete and Agile Database for Building Our Faculty and Staff Team

Objective 5.1.3: CIC will develop a listing of innovative short-term and long-term faculty and staffing solutions such as adjunct faculty or fellowships and identify the conditions under which each solution is appropriate.

Measure 5.1.3: Use of alternative staffing solutions to ensure that staffing gaps are filled with minimal delays or impact on student learning.

Outcome 5.1.3: CIC will be equipped to address gaps between permanent hires of faculty and staff and to fill our emerging needs and gaps in knowledge, skills, and competencies, improving consistency of education and administration for students and quality of life for all faculty and staff.



Goals, Objectives, Measures, and Outcomes

Goal 5.1.4: Organizational Culture Supports CIC Being an Employer of Choice

Objective 5.1.4: Develop a supportive organizational culture that promotes teamwork, trust, and work-life balance to better support workforce satisfaction and ensure employee retention.

Measure 5.1.4: Several measures will be used as gauge of the development of a supportive organizational culture, including:

- Level of leadership engagement on work-life balance issues and other workplace satisfaction issues.
- Sufficient time for all aspects of TRESA.
- Faculty and staff report increased workplace satisfaction.
- Increased rates of faculty and staff retention.
- Faculty participation in sabbatical programs.
- Internal and external professional development opportunities.
- Faculty and staff participation in mentorship programs.
- Faculty and staff recognition programs, including awards.

Outcome 5.1.4: A supportive organizational culture is evident, leading to increased workplace satisfaction and employee retention rates.

Goal 5.2: Deliver World Class Research, Scholarship and Thought Leadership

Goal 5.2.1: Translating Knowledge, Experience and Scholarship Into Leading Educational Design and Facilitation

Objective 5.2.1: With input from CIC faculty and staff, we will identify 1) critical pedagogical skills for CIC's curricula, 2) NDU platforms and software relevant to the curricula, 3) emerging skills, methods, platforms, and technologies available outside NDU that may be useful in our classrooms, and 4) a process for updating this list as new platforms and technologies emerge. We will create opportunities for faculty and staff to learn these skills, methods, platforms, and technologies.

Measure 5.2.1: CIC will hold faculty and staff development sessions each year to develop pedagogical skills or technical knowledge for the classroom. Individual faculty and staff will develop a plan to improve pedagogical and technical skills via internal and external opportunities and as part of TRESA performance plans. CIC will provide resources for on-site training or for faculty and staff to attend off-site training. We will create a system of accountability for leadership to provide for and faculty and staff to learn and implement these new skills, methods, platforms, and technologies.

Outcome 5.2.1: CIC faculty will be better equipped to succeed in the classroom, enhancing the student learning experience.

Goals, Objectives, Measures, and Outcomes



Goal 5.2.2: Achieving Harmony and Synchronization Between Education, Facilitation, Research and Publication

Objective 5.2.2: CIC will match faculty members with stakeholders to develop and maintain active and enduring relationships with stakeholders and ensure that the College supports their research needs.

Measure 5.2.2: Faculty will maintain regular contact and report each semester on their engagement efforts, including that stakeholder's research priorities and engagement and interest in CIC events. When possible, faculty members will help connect a stakeholder's priorities with additional faculty members interested in conducting that research or working with a stakeholder on a relevant initiative. CIC must maintain and build relationship with critical DOD stakeholders, interagency partners, and the private sector. With faculty input, the Chancellor will review and determine additional priorities for stakeholder engagement each academic year.

Outcome 5.2.2: CIC will align our research and engagement priorities with stakeholders' needs while building and maintaining durable relationships with stakeholders. CIC will align its certificate programs to match stakeholder and sponsor needs through stakeholder input or formal sponsorships and partnerships.

Goal 5.2.3: Balance Teaching Requirements with Research Priorities in the Service of Mission and Stakeholders

Objective 5.2.3: CIC Department Chairs will work with faculty and staff to ensure sufficient time and resources to conduct research projects in accord with all other duties of faculty and staff. When determining how to balance TRESA performance plan elements, CIC leadership must prioritize faculty research that directly supports our core courses and our stakeholders' priorities or that promotes significant innovation in the national security enterprise.

Measure 5.2.3: CIC faculty increase research activity and publication.

Outcome 5.2.3: CIC faculty research will support stakeholder needs. CIC will benefit from improved stakeholder relationships and faculty satisfaction and retention.

Goal 5.2.4: Be at the Center of the Most Critical Conversations, Innovations, and Ideas in Cyber and Information Strategy

Objective 5.2.4: CIC will continue to develop and promote its signature events (e.g. Cyber Beacon) to students, alumni, and external stakeholders. It will ensure that such events account for both cyber and information related equities and events. CIC will appropriately resource these events and make them accessible to a broader audience through internal and external funding sources or partnering with stakeholders. CIC will make efforts each year to engage new stakeholders in its events.

Measure 5.2.4: Interest and attendance at CIC's events increase annually. Reflections of events increase on social media.



Goals, Objectives, Measures, and Outcomes

Outcome 5.2.4: CIC events will become “must-attend” events critical to professional development and innovation in the information and cyber communities.

Goal 5.2.5: Advance the College, Its Mission and Stakeholders Through Shared and Synchronized Strategic Engagement Planning

Objective 5.2.5: Led by the Director of Strategic Engagement, CIC will promote faculty research to relevant professional communities, alumni, DOD internal newsletters, national media, and its website to highlight faculty efforts and enhance awareness of CIC’s identity as a thought leader.

Measure 5.2.5: CIC faculty research products are increasingly viewed and cited. External requests for faculty to present or be interviewed about research increase. Stakeholder requests for research support increase.

Outcome 5.2.5: CIC’s faculty—and, by extension, CIC—will be recognized as thought leaders in information and cyber strategy.

Goal 5.3: Mobilize All Available Resources to Achieve our Mission and Secure Our Future

Attain Resource Levels Appropriate for the Nation’s Leader for Education, Research, and Collaboration in Global Information and Cyber Strategy

CIC has a vital need for increased levels of resources, of all kinds to achieve all of the Goals outlined in this Plan. It has also been written to provide recognition of the CIC’s unique position amongst senior service schools, offering not only a JPME2 In-Residence, Master’s program, but also a part-time Master’s degree and an array of bespoke cyber workforce programs – all of which require the College to achieve not only higher levels of resources, but the institutional and administrative authority and capacity to receive funding for such services. Further, this Goal was crafted to recognize that in the coming years, the College must build on, advance, and increase awareness of its value proposition, program offerings, and leading role in cyber and information strategy through comprehensive and effective communications and outreach.

Objective 5.3: CIC should identify all possible funding sources for its programs, support services, and operations.

Goals, Objectives, Measures, and Outcomes



Measure 5.3:

- Number of and Dollar Value of Grants Awarded to CIC or its Faculty.
- Number of and Dollar Value of Cooperative Agreements with DOD and other agencies.
- Tuition was received from Master's degree and graduate certificate course attendance.
- Tuition received from in-residence leadership development programs.
- Funds received from non-profit entities to fund initiatives or activities.
- Funds received from industry partnerships to fund initiatives or activities.
- CIC's percentage of NDU budget.
- CIC billets authorized and funded.

Outcome 5.3: CIC's programs and services are stable, growing, and dynamic, with funding levels commensurate with resource needs. This allows programs to grow sustainably and be responsive to stakeholders' needs.



Lt. Col. Shiraz A. Khan (USAF), Top Graduate for the JPME Class of 2024, being congratulated by Chancellor Lewis



CIC Students Engage in Active Learning



Students participating in the end-of-year Capstone exercise



Students visit the United Kingdom's Permanent Joint Headquarters (PJHQ) in Northwood, London



Students at MILREM, an Estonian robotics company



Students attend the 10th Anniversary of CIC's Cyber Beacon Conference

Conclusion



The complex environment in which NDU, CIC, and its graduates operate requires the College to keep pace with the rapidly changing pace of strategic competition, emerging technology, and the intricacies of working in the cyberspace and information ecosystem. As the Chairman of the Joint Chiefs of Staff, General Brown, has stated, “Our nation needs us ready to fight today’s battles but also to prepare for tomorrow’s wars... We must prepare by modernizing and aggressively leading with new concepts and approaches. Know that my conviction to ‘Accelerate Change’ has not wavered.”

Our CIC graduates will lead and implement national security strategy in the rapidly changing domains of information and cyberspace. CIC has a no-fail mission to prepare our graduates for the unknown challenges ahead. CIC must adapt its curriculum, advance and increase awareness of its value and programs, enhance the quality of the student experience, support faculty innovation, scholarship, and development; establish a course life cycle management system; launch a comprehensive assessment program; and develop additional resources to support the future of strategic leadership in information and cyberspace. As CIC enters its seventh decade, we will continue building partnerships with stakeholders and developing our faculty and staff to achieve educational excellence.

The goals and priorities in this Plan will define our way ahead as we move from strategy to implementation. Our goals, in concert with our forthcoming implementation plan, will guide our approach to fulfilling our vision. To ensure steady progress towards and to achieve our desired outcomes, we will monitor and track our progress in achieving these objectives. We stand ready to adapt this plan to the ever-changing cyberspace and information operating environment, future challenges, and new priorities while remaining steadfast in our commitment to our vision, mission, and values.



Students from the Spring 2024 Chief Information Officer Leadership Development Program



About CIC's Academic Programs

CIC offers a 10-month, in-residence master's degree based on a JPME II curriculum focused on preparing military and civilian leaders on how best to integrate information and cyberspace operations within the broader national security framework. This program has approximately 60 students selected to attend the program each year and is generally comprised of O-5 or O-6 U.S. military officers, GS-15 civilians from Defense agencies or other federal agencies such as Department of State or Department of Homeland Security, and military officers from allies and partner nations. Those that complete this intensive program are awarded a Master of Science degree in Strategic Information and Cyberspace Studies.

CIC also offers academic programs for the Cyber Workforce based on a competitive admission process. The DOD's Chief Information Officer oversees CIC's Cyber Workforce Program. These programs accept applications from U.S. military officers (O-4 and above), Chief Warrant Officers (CW3 and above) and senior enlisted members (E7 and above), federal employees, and eligible industry employees. Cyber Workforce programs allow for part-time enrollment and are delivered in-person and online. The part-time Master of Science Degree in Strategic Information and Cyberspace Studies may be completed over a period of 3-5 years. The Cyber Workforce academic program also includes graduate certificates including Cyber Security, Cyber Leadership, Chief Information Officer, Chief Data Officer, and Chief Financial Officer. These 15-credit graduate certificates may be completed over a period of 1-4 years.

Students may also apply to attend CIC's Leadership Development Programs which are in-residence programs that result in the award of either the Cyber Leadership (Fall semester) or Chief Information Officer (Spring semester) graduate certificate. As part of these 14-week programs, students complete required academic courses, participate in leadership exercises, attend government and industry site visits, and complete a domestic field study at the completion of the program. CIC works to align these courses and offerings with stakeholder interests and requirements.



Family and friends look on as students prepare to receive their diplomas at the 2024 NDU Graduation Ceremony

CIC Leadership



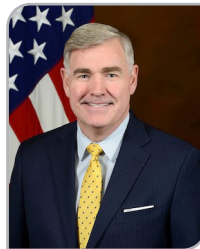
Dr. Cassandra C. Lewis
Chancellor



Mr. Andrew V. Walsh
*Deputy Chancellor and
State Dept. Chair*



Dr. Frank Marlo
*Dean of Faculty and
Academic Programs*



Mr. Stuart K. Archer
*Dean of Administration and
Operations*



CAPT Roman Mills (USN)
*Dean of Students and
Sea Services Chair*



Dr. Jim Chen
*Associate Dean of
Academic Programs*



Dr. Matthew Easley
*Associate Dean of
Joint Warfighting*



Dr. Marwan Jamal
*Chair, Infrastructure and
Disruptive Technology Dept.*



Dr. Dorothy O. Potter
*Chair, Information Strategy
Department*



Dr. Andrew Whiskeyman
*Chair, Cyber Strategy
Department*



**National Defense University
College of Information and Cyberspace**

**Marshall Hall
300 5th Avenue SW
Fort Lesley J. McNair
Washington, D.C. 20319
202-685-2080**

<https://cic.ndu.edu>