ANCHORING TO QUALITY STANDARDS: ACHIEVING ISO 9001 CERTIFICATION AT THE NAVAL POSTGRADUATE SCHOOL'S DEPARTMENT OF DEFENSE MANAGEMENT

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NAVAL POSTGRADUATE SCHOOL

MONTEREY, CALIFORNIA

SUPPLEMENTAL TO SYSTEMS ENGINEERING CAPSTONE REPORT

(3 of 9: Global Accreditation Center-PMI Self-Assessment)

ANCHORING TO QUALITY STANDARDS: ACHIEVING ISO 9001 CERTIFICATION AT THE NAVAL POSTGRADUATE SCHOOL'S DEPARTMENT OF DEFENSE MANAGEMENT.

by

Siddiq A. Hasan, Derez A. Jones, and Stephen J. Loman

December 2024

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13. ABSTRACT (maximum 200 words)

This capstone project investigates the pathway to achieving ISO 9001:2015 certification for the Department of Defense Management (DDM) at the Naval Postgraduate School (NPS). Although DDM upholds high academic standards and existing accreditations, the lack of ISO 9001:2015 certification reflects gaps in the current Quality Management System (QMS) in areas such as process documentation, risk management, and operational consistency. Using a systems engineering (SE) approach, the project systematically decomposes ISO requirements, conducts a gap analysis, and identifies specific areas of non-compliance. Findings reveal that while the DDM meets several key requirements, targeted improvements are needed to align fully with ISO standards. Recommendations include the creation of a comprehensive QMS roadmap that provides step-by-step guidance, resource allocation, and a timeline for certification. The proposed framework not only supports the goal of ISO certification but also strengthens operational efficiency, stakeholder confidence, and quality assurance within the DDM.

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DEPARTMENT OF DEFENSE MANAGEMENT

SELF-ASSESSMENT REPORT

for

GAC-PMI ACCREDITATION

NAVAL POSTGRADUATE SCHOOL

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March 18, 2024

The Project Management Institute Global Accreditation Center
for Project Management Education Programs {GAC)
Attention: Global Accreditation Center for Project Management Education Programs Manager
18 Campus Drive
Newtown Square, PA 19073
United States

Dear Global Accreditation Center for Project Management Education Programs Manager,

Please accept this Self-Assessment Report on behalf of the Naval Postgraduate School, Department of Defense Management for GAC accreditation of its *Master of Science in Program Management (836) Distance learning—Program and the Master of Science in MS in Defense Program Management (816) Resident Program* submitted for GAC accreditation.

Uploaded with this cover letter please find:

I. Updated information since the submission of the original Letter of Intent.
II. All responses, including evidence, demonstrating that the programs align with each of the GAC Accreditation Standards contained in the *GAC Accreditation Handbook (S.OJ.*
III. Request for invoice for payment of the GAC Self-Assessment Report Fee {"Accreditation Fee" or "Re-evaluation Fee" in the GAC Handbook 8.7).

We certify that all of the facts submitted in this Self-Assessment Report are true to the best of our knowledge. Please contact us if any further information is needed to support this application.

Sincerely,

Raymond Jones Digitally ,igned by Raymond 2024.0J.141s,11,20-otoo·

Signature

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Global Accreditation Center
Project Management Institute.

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Updates to the Original Letter of Intent

Complete the chart below noting any changes to the information provided in the original accepted Letter of Intent, such as course changes, updated numbers of enrolled students, graduates, and so forth.

Letter of Intent Section	Updated Information
Name and Location:	No change
Business Unit:	No change
C.1: Institution Accreditation and Legal Authority:	No change
C.2: Degrees or Awards Eligible for Accreditation:	**CHANGES** **1**. Changed name for one degree; from MS in Systems Acquisition Management (816) to MS in Defense Program Management (816) at the request of program sponsors to align the resident degree name of 816 with the distance learning 836-degree name, and align the name with program objectives, ESRs and courses. **2.** In the past year we changed our degrees from MBA to master's in management. Most of our courses, apart from a few waiting for final approval, reflect this administrative change— from GB to MN. **3.** MN4090 does not have a syllabus because it is not a course. It represents a block of research time that students have to work on their capstone projects. **4**. In the MSDPM (816) students can take MN4044 Managerial Inquiry and Innovation Capstone Lab in place of GB/MN4045 Defense Focus Managerial Inquiry.
C.3: Period of Operation	No change to 3.1 Period of Operation Updated C.3.2. table as of end 2023 (see below)
C.4: Administrative Structure and Academic Leadership:	No change

Table 1.MSPM (836) Distance Learning

C.3.2: Data illustrating the number of students enrolled each year and graduated each year from the program **(Up to five years as applicable).**

Year:	Number of Students Enrolled:	Number of Graduates:
2018	25	29*
2019	12	26*
2020	42	9
2021	22	18
2022	25	23
2023 (from January 1-December 31)	20	7

* As mentioned in the Letter of Intent, numbers can be higher in students graduating because of students given previous extensions also graduating.

Table 2. MS in Defense Program Management (816) Resident

C.3.2: Data illustrating the number of students enrolled each year and graduated each year from the program **(Up to five years as applicable).**		
Year:	Number of Students Enrolled:	Number of Graduates:
2018	18	14
2019	9	13
2020	6	4
2021	6	4
2022	8	5
2023 (from January 1-December 31)	12	5

GAC Accreditation Standards

Each academic program applying for accreditation by GAC must demonstrate that its academic degrees or awards align with the GAC Accreditation Standards.

D.1 Program Mission

The program shall have a clearly defined and publicly stated mission supported by objectives, consistent with the mission of the academic institution, and relevant to the management of projects.

To demonstrate that the above standard is met, the program shall submit the following information:

D.1.1: Evidence that the program has a mission statement and that it is publicly available.

The Department of Defense Management (DDM) at NPS is described in the NPS Academic Catalog at https://nps.smartcatalogiq.com/en/current/academic-catalog/departments/department-of-defense-management/

DDM Mission:

To serve our Nation by educating U.S. and allied military officers as well as defense civilians in defense-focused business and public policy, by conducting research in defense management and public policy, and by providing intellectual resources for leaders and organizations concerned with defense business management practices and policies.

DDM Vision:
To be recognized as the nation's premier school for defense-focused management and public policy education and research. To be the institution that national leaders look to for education, research, information, and innovation in the management of the business of defense. To be recognized by our students, alumni, and other stakeholders for our excellence in defense-focused education and research.

Both the Master of Science in Program Management (836) and the Master of Science in Defense Program Management (816) are reflected in the DDM mission as they share goals and values that contribute to the mission of the department and align with the department overall objectives.

An overview of DDM can be accessed at the following link: https://nps.edu/web/ddm/about-ddm

The NPS academic catalog can be accessed at: https://nps.smartcatalogiq.com/en/current/academic-catalog/

D.1.2 : Description of how the program's mission is aligned with the mission and/or vision of the academic institution.

DDM's mission is nested within and supports the NPS mission and vision. To meet its advanced educational requirements, the Navy, and Department of Defense (DoD) have a unique academic institution at the Naval Postgraduate School (NPS) with specially tailored academic programs and a distinctive organization tying academic disciplines to Naval and Joint War Fighting strategic applications.

The student body consists of officers from all branches of the U.S. uniformed services, officers and civilians from other countries and civilian employees of the federal government as well as state and local governments. A limited number of defense contractors and enlisted personnel are also enrolled. Selection for graduate education at NPS is based on

outstanding professional performance, promotion potential, and a strong academic background. Students receive graduate degrees as a result of successful completion of programs designed primarily to prepare them for future career assignments. Degrees are awarded based on the same high academic standards that prevail at other accredited institutions.

As an academic institution, NPS emphasizes study and research programs that are relevant to the Navy's interests, as well as the interests of other branches of the Department of Defense (DoD). The programs are designed to accommodate the unique requirements of the military, defense department and other federal agencies, including requirements for Defense Acquisition Certification. (Link: https://nps.smartcatalogiq.com/en/current/academic-catalog/the-naval-postgraduate-school/the-institution/)

NPS Mission:

The Naval Postgraduate School provides defense-focused graduate education, including classified studies and interdisciplinary research, to advance the operational effectiveness, technological leadership, and warfighting advantage of the Naval service. (Link: https://nps.smartcatalogiq.com/en/current/academic-catalog/the-naval-postgraduate-school/mission/)

Vision:

The Naval Postgraduate School will become the nation's leading institution for defense higher education and applied research, delivering transformative solutions and innovative leaders for decisive U.S. Sea power and national defense.

The defining distinction for both NPS and DDM is our defense focus, which drives our[1] mission, our strategy, our objectives, and our daily work, including how we engage with, innovate for, and impact our stakeholders.

We pursue our vision and perform our mission through graduate education, research, and professional service.

- In Education: Through resident and distance learning degree and non-degree programs, we develop students' abilities to analyze, think critically, and take intelligent actions so they can more effectively carry out their future professional responsibilities to manage organizations, resources, people, and programs in complex, sometimes life-threatening environments.
- In Research: Conduct research, using the scholarships of discovery, application, integration, or teaching, that supports defense enterprise decision-making, problem solving, and policy setting; improves business management processes and practices; contributes knowledge to academic disciplines via dissemination in high-quality refereed research journals or suitable practitioner-oriented journals; and advances the development of graduate education.
- In Professional Service: Provide professional expertise that advances knowledge and business management within DDM, NPS, the Department of Navy, the Department of Defense, and other government agencies, as well as in our professional and academic organizations.

In support of our mission and NPS mission, we offer eight Masters of Science (MSM) degrees:

[1] We refer to DDM as "we/our" throughout the report.

Table 3. Degree Programs in DDM Resident and Distance Learning

Degree	Delivery Mode
MS in Defense Contract Management (815)	Resident
MS in Defense Financial Management (837)	Resident
MS in Defense Logistics Management (819/827)	Resident
MS in Management (Manpower Systems Analysis and Defense Systems Analysis) (817/847)	Resident
MS in Defense Program Management (816)	Resident
MS in Defense Contract Management (835)	Distance Learning (Synchronous web-enabled) Part-Time
MS in Defense Program Management (836)	Distance Learning (Synchronous web-enabled) Part-Time
MS in Defense Financial Management (857)	Distance Learning (Synchronous web-enabled) Part-Time

Consistent with our mission, as well as with the Association to Advance Collegiate Schools of Business's (AACSB) standards accreditation we have designed our program to provide students many opportunities to connect their education in the theory and practice of defense management with real-world challenges.

MSPM (836): Students in this program are nonresident students and pursue the degree part-time while performing their full-time DoD jobs. As members of DoD's acquisition workforce, they work in positions that entail program and contract management tasks. Therefore, the MSPM 836 provides knowledge and skills that directly apply to their jobs. These students complete their Capstone Applied Project (CAP) on a "real-world" problem under the advisement of a full-time NPS faculty member and may include advisement from a senior practitioner at the student's agency.

MS in Defense Program Management (MSDPM) (816): Students in this program are resident students assigned to NPS to pursue full-time studies. They have a specific-duty position awaiting them, and they are aware their future position (and their leaders) will expect them to demonstrate the new competencies they gain in their degree program; therefore, the MS in Defense Program Management (816) provides knowledge and skills that directly apply to their jobs. Most of these students accomplish their capstone research project on a "real-world" problem under the advisement of full-time NPS faculty members, one of which must have a terminal degree.

All courses in both programs have significant defense content in terms of defense management cases, readings, and projects; this encourages students to operationalize mainstream management concepts and tools in the specific context of defense practice. All the courses have content that is exclusively relevant to professional practice, and meets needs articulated by educational program sponsors. Students accomplish their capstone degree requirement (whether thesis or professional project) on a topic of defense management practice that typically requires a significant level of professionally relevant engagement in the area, often through interaction with practitioners, data collection and analysis, and policy evaluation. DoD sponsors and other officials routinely provide topics for student research, and they also provide students with access to data sources. Often, when our faculty members are asked to perform studies and analyses for DoD sponsors, they will recruit students for these projects, which engages the students in important and relevant research.

Our Acquisition Research Program receives financial sponsorship from several senior acquisition-related offices and departments across the DoD. In the last five years, the ARP has provided resources in support of over 900 projects by NPS students and faculty, as well as dozens of institutional researchers from around the world. Each year, the Annual Acquisition Research Symposium draws investigators, students, and practitioners/policymakers to Monterey to discuss research findings and directions for future work. This event provides students and faculty the opportunity to hear presentations from and interact with senior federal government and DoD acquisition professionals.

Additionally, NPS has a separate, dedicated organization, the Center for Executive Education (link: https://nps.smartcatalogiq.com/en/current/academic-catalog/institutes-and-centers/center-for-executive-education-cee/), which offers traditional executive education to Admirals, Generals, their civilian equivalents in the Senior Executive Service, and upwardly mobile leaders just below that level. Our faculty participates in sessions appropriate to their expertise.

D.1.3 : Description of how the programs' mission is relevant to the project management profession.

DDM mission is relevant to the project management profession in several ways. Our programs often involve real-world case studies and practical applications. Students learn from defense management scenarios gaining valuable insights and skills that are applicable to various project management challenges. Strategic leadership, problem-solving, critical thinking, resource management, stakeholder engagement, communications, and decision-making are emphasized in our curricula and are applied to project management; these principles provide important skills to make critical decisions and to lead teams in different organizations. Lastly, students gain experience in the development of project, program, and portfolio plans and in the management of cost, schedule, performance constraints through risk management—the high risk and stakes scenarios present in DoD—and the adoption of cutting-edge technology used in DoD industries and organizations help students to understand how to manage risk and how to benefit from technological innovations.

D.1.4 : Description of how the program's mission contributes to society.

DDM is a dynamic organization, continually self-assessing and evolving to maintain close alignment to priorities of the Secretary of the Navy and the Navy's ongoing Education Enterprise Requirements and Resourcing Review Board (E2R3B) process. Our programs, including the Master of Science in Program Management (836) distance learning (DL) degree and the Master of Science in System Acquisition Management (816) resident degree, integrate the principles of *Get Real Get Better* (*GRGB*), focusing on leader development in complex defense management environments.

In 2022, DDM modernized how the Naval Postgraduate School delivers graduate education, research, and capabilities in defense management. These changes included the following:

- Flexible options to complete degrees in 12, 15, or 18 months.
- Focused academic certificates that align to Naval and DoD professional certifications.
- Expanded capstone options that include Innovation Capstone Projects, experiential research projects that iterate with transition sponsors to deliver both validated problem sets and tangible solutions.
- Alignment with NPS strategic priorities to deliver Defense-unique and Naval-relevant research, education, and innovation undergirded by a mission-focused institution designed to develop defense leaders in modern and technologically relevant facilities.
- Responsiveness to Naval priorities articulated by SECNAV guidance, Naval education enterprise, Get Real Get Better, and other core strategic guidance.

The MSPM (836) and the MSDPM (816) degrees contributes to society by educating students and enhancing program management expertise, improving defense efficiency, fostering technological innovation, supporting disaster response and humanitarian aid, promoting international cooperation, and contributing to research and innovation that can benefit both military and civilian sectors.

D.1.5 : Description and evidence of regular assessment of the program's mission ensuring relevance to the project management profession.

As described in section D.1.2 above, we assess our DDM mission through our degree programs. Degree programs have competencies and objectives that are driven by DDM mission, which is driven directly by the NPS mission and vision. Each degree program contains educational skill requirements (ESRs) which are validated by the major area sponsor for

that degree program. To make sure that DDM mission and NPS mission are accomplished, we measure students' level of achievement in those competencies through quarterly assessments of program courses. The results are then collected, analyzed, and discussed by faculty who decide and implement course of action for continuous improvement, if necessary (See appendix 9 for our Assessment Process and Framework and appendix 12 section D.2, for a summary of the analysis and the continuous improvement actions.)

D.2 Curricula and Student Achievement of Learning Outcomes

GAC recognizes the dynamic nature of the management of projects. Thus, programs are to provide academic curricula that integrate practice and theory at different degree levels while honoring each program's unique context. GAC encourages programs to be innovative and forward thinking in developing curricula that will both advance the profession and prepare students to be effective professionals who make a positive contribution to society. GAC requires programs to offer curricula that assure student achievement of three GAC core areas of focus for learning outcomes that address generally accepted practices, knowledge, and competencies found within the management of projects discipline and documented in professional standards.

For the following areas of focus, programs are required to demonstrate student achievement of learning outcomes for each academic degree that reflect appropriate levels of academic achievement in higher education.

Area of Focus 1: Technical Expertise
Management of projects to meet needs within constraints, with reference to professional standards and frameworks.

Area of Focus 2: Professional Behavior
Ethical and culturally aware stakeholder engagement, communication, leadership, and teamwork.

Area of Focus 3: Strategic Awareness
Contextual awareness and knowledge of strategic, societal, and operational drivers required to inform decisions and deliver sustained competitive advantage.

To demonstrate that the above standard is met, the program shall submit the following information:

D.2.1: Description of the academic degree or award including:

MSPM (836): the degree is a 24-month, part-time distance learning program open to qualified DoD uniformed personnel, federal employees, international students, and a limited number of DoD contractor personnel. Students that complete the degree program for Program Management earn numerous DAU fulfillments in other functional areas. Navy officers are also awarded subspecialty code 6502P Systems Acquisition Management. (Refer to link: https://nps.smartcatalogiq.com/en/current/academic-catalog/departments/department-of-defense-management/non-resident-degree-programs-and-curricula/master-of-science-in-program-management-curriculum-836-dl/)

The MSPM is an advanced education in the concepts, methodologies, and analytical techniques necessary for successful l management of programs/projects within complex organizations. The program focuses on leadership, problem solving and decision making within the acquisition environment utilizing case studies, teaming exercises, hands-on applications, active participation, and integrative exercises. Lecture and laboratory tasks require the application of critical thinking to problem solving within notional and actual situations. The curriculum is designed to provide graduates with the knowledge, skills, and abilities to manage and lead effectively in the federal government acquisition environment.

The MSPM requires completion of a minimum of 48 credits hours of graduate-level courses, at least 12 which are at the 4000 level. Completion of an acceptable Capstone Applied Project, with at least one advisor from the Department of Defense Management. The program's work course delivered covers all three GAC-PMI *Core Areas of Focus* and all the courses are mandatory. (See appendix 1 section D.2 for both programs)

MSDPM (816): the degree is an interdisciplinary program designed to integrate business principles, program leadership and management theory, operations analysis, and systems engineering applications. It is uniquely tailored to federal government acquisition management and intensive exposure to the fundamental principles of the acquisition environment. The courses in this program apply business analysis and problem-solving techniques essential to effective major system program management within the structure of DoD acquisition management. It further focuses on the decisions and problems facing the project/program/portfolio manager, the various forces at work within industry and government, and the impact of acquisition policies and strategies. The program can be delivered in 12 to 18-months, by adding Joint Professional Military Education courses or elective academic certificates as required. (Refer to link: https://nps.smartcatalogiq.com/en/current/academic-catalog/departments/department-of-defense-management/ddm-resident-programs-and-curricula/defense-program-management-curriculum-816/defense-program-management-track-816/)

D.2.1.1: How it executes its mission

The MSPM (836) and the MSDPM (816) programs execute their mission through a combination of academic, research, and practical elements. Their curriculum is aligned with the Department of Defense Management's mission and objectives and includes courses with practical exercises and case studies designed to provide students with a

comprehensive understanding of program management principles and their application in defense contexts. The programs also maintain a high standard of educational excellence with experienced faculty members who have expertise in program management and related fields, ensuring that students receive a top-quality education. These educators come from various disciplines, including management, engineering, and defense studies. This element is combined with practical applications of real-world scenarios and of program management principles where students are often required to work on case studies, projects, and assignments that mimic the complexities they will face in their future roles as military officers or defense professionals.

At research level, DDM and the MSPM and MSDPM (816) programs engage in research activities related to program management. This research contributes to the body of knowledge in program management leading also to innovations in best practices.

The military and defense focus of our program meets the specific needs of military officers and defense professionals, and it emphasizes the unique challenges and requirements of program management within the defense sector. Lastly, International collaboration is another important element of the program. As part of our student body is composed by international military officers, there are many opportunities for cultural exchange and international collaboration that ultimately contribute to NPS and the program's mission of promoting security cooperation and peace worldwide.

D.2.1.2 : How it reflects professional standards and/or frameworks utilized in the curricula

Both programs align with the Department of Defense's (DoD) acquisition and program management framework, which includes regulations, guidelines, and policies unique to defense program management. This framework ensures compliance with DoD standards. Graduates earn fulfillment credit for the Defense Acquisition Workforce Improvement Act (DAWIA) required Defense Acquisition University (DAU) training for the Program Management Practitioner level certification. The courses in the degree programs align with the DoD Program Management competency model that includes the areas of Acquisition Management, Technical Management, Business Management and Executive Leadership. The areas are further divided into 13 units of competency with 49 specific competencies. The executive leadership competencies include Foundational Skills (interpersonal skills, integrity and honesty, effective communication, continual learning, public service motivation, and technical credibility), Leading Change (creativity and innovation, vision, flexibility, resilience), Leading People (conflict management, leverage diversity, develop others, team building), Results Driven (accountability, decisiveness, customer service focus, problem solving), and Building Coalitions (influencing/negotiating and partnering).

Acquisition Management: the management of a defense acquisition program covers every aspect of the acquisition process while complying with acquisition law and policy. The following are competencies and sub-competencies in Acquisition Management:

1. *Capability Planning/Integration* – An ability to understand and manage requirements, resources, processes, and contracts based on integrated program planning, and a product Work Breakdown Structure (WBS) spanning government and industry responsibilities. This includes the capability to manage program scope and dependencies via linkage between the Integrated Master Plan, WBS, and Integrated Master Schedule (IMS) characterized by clearly defined performance measures and accomplishment criteria.

2. *Acquisition Law and Policy/Services Acquisition* – Knowledge of acquisition policies, processes, and best practices. Strength in the formulation of technology development, acquisition, and support strategies (including international opportunities), to maximize warfighter capabilities, minimize cost, schedule, and risk, and incentivize industry performance. Knowledge of acquisition policy, regulation, and practices required to award and manage contracts for professional services, Information Technology services, research and development, and maintenance.

3. *Program Execution/Health Assessment/Reporting* – An ability to adapt to dynamic environments and challenges through accurate and timely reporting of program progress, trends, and risks. Ability to interpret and synthesize multi-disciplinary performance information (i.e. schedule, cost, technical, and risk) to support proactive leadership decisions and reporting. Connect continuous assessment of program performance data with analysis and reporting tools, within the context of a robust, risk-informed performance measurement baseline.

4. *International Acquisition and Exportability* – For employees in positions with International Acquisition as a career path, it is essential they are knowledgeable of the policies and regulations that govern Security Cooperation acquisitions. Also, it is significant their readiness to develop and implement acquisition solutions to incorporate aspects associated with international defense programs.

5. *Services Acquisition* – Knowledge of acquisition policy, regulation, and practices required to award and manage contracts for professional services, Information Technology services, research and development, and maintenance.

Technical Management: Technical management effectively integrates planning and execution tasks with the science and technology community, lead systems engineer, information technology lead, test and evaluation lead, logistics and product support lead, and production manufacturing and quality lead. In Technical Management, a PM workforce member must possess knowledge of systems engineering policies and best practices to allocate, model, and trace functional requirements to system design, and identify capability and cost tradeoff alternatives. PM workforce members conduct program reviews, manage technical data; and evaluate schedule and earned value data against technical performance data. Additionally, they maintain and report accurate program status, including risk. The following are competencies and sub-competencies in Technical Management:

1. Science and Technology (S&T) Management – Understand how S&T supports and flows into the product development process; how the different participants in the S&T community (Warfare Centers/Government Laboratories, Federally Funded Research and Development Centers (FFRDCs), University Affiliated Research Centers (UARCs), and Contractor Independent Research and Development (IR&D) contribute to product developments and the methods Program Managers can use to leverage these opportunities.

2. Engineering Management – Completely understand the Systems Engineering process and how to analyze, derive, and allocate feasible and effective requirements from user capabilities/requirements, including requirements decomposition and configuration management. Understand the Technical Review process and goals. Integrate essential acquisition and sustainment activities into the engineering process – including those related to software within technical planning activities; evaluate stakeholder inputs and ensure they support the planned pathway and requirements analysis process.

3. Defense Business Systems (DBS) and Others – Understanding of DBS certification requirements and can integrate and manage certification activities in the IMS. Know the technical execution details of Rapid Deployment of Capability, Services Acquisition, and other pathways; know and be able to use appropriate government or commercial tools for Program Management, Engineering Management, and Financial Management.

*4. Test & Evaluation (T&E) Strategy and Managemen*t – Understand how T&E supports and validates the system engineering process; evolutionary testing techniques suitable to an evolutionary acquisition program strategy, agile acquisition/development, and determine the systems' readiness for T&E. Be able to perform test planning and execution both in-house and associated with product acceptance testing.

5. Manufacturing Management – Understand transition from engineering development to manufacturing; drawing/plan procedures to include redlines and configuration management throughout the manufacturing process; manufacturing progress monitoring addressed with cost and schedule metrics such as earned value; and considerations related to tooling and sparing associated with product line starts or stops.

6. Product Support Management – Demonstrate understanding/application of comprehensive and affordable product support strategies that meet program goals for operational effectiveness and readiness; know supply chain management techniques and documentation with particular knowledge of evolving security considerations.

Business Management: Business management integrates planning and execution across acquisition support systems, leveraging knowledge and experience in contract management, financial management, and personnel management. Results should demonstrate systemic budget development and controls, realistic funding profiles, accurate personnel requirements, and effective cost modeling and estimates. Proficiency in Business Management includes the ability to integrate technical and business resources. These capabilities are essential for effective source selection planning, solicitation, disciplined and transparent selection and award, effective contract management and administration, use of auditing resources, and accurate and timely reporting of program execution, trends, and business risks. Business Management also consists of the following competencies and sub-competencies:

1. *Contract Management* – Knowledge and understanding of the Defense industry/contracting environment, including finance, resource allocation and management, planning and measurement processes and practices, and incentive structures. Ability to execute the contracting process from market research to contract closeout from a Program Manager's perspective. Familiarity with the differentiation between a prime mission product contract and service contracting.

2. *Financial Management* – Demonstrate an understanding and/or application of the Planning, Programming, Budgeting, and Execution (PPB&E) cycle, requirements for budget exhibits to support the financial planning process, the importance of financial obligations and expenditures, funding requirements and constraints for different funding types, and ability to assess the adequacy of the budget. Understand cost estimating; demonstrate an understanding and/or application of total ownership costs over the item's useful life, and integrated, synchronized, total-system, life-cycle logistics chain to meet user requirements.

3. *Personnel Management* – Demonstrate an understanding and application of the selection process for PM positions, the personnel evaluation process, and the differentiation of roles and responsibilities available to Government, FFRDCs, and Contractor staff.

Figure 1. DoD Program Management Competency Model

D.2.1.3: How it serves potential and current students

The MSPM (836) and the MSDPM (816) programs provide students an opportunity to pursue advanced education and to advance their careers in the military and in the DoD Acquisition functional areas of program management, contracting, financial management/cost estimating, engineering & technical management, test & evaluation, and lifecycle logistics. In this environment, they have experienced instructors and mentors who have worked in the field of program management and provide the opportunities to work in real-world scenarios. Feedback from our students also highlights their appreciation for the networking opportunities offered by the program with other students, alumni, and professionals in the field. This helps them to build a strong professional network valuable for career advancement.

D.2.2: List the program learning outcomes reflecting the academic degree or award level and the knowledge, skills, and/or competencies acquired throughout the program.

The general competency and objective for the MSPM (836) DL and the MSDPM (816) resident degree are the following:

Competency: *Our graduates will be effective program managers and leaders of people and resources within DoD organizations.*

Objective: *Our graduates will lead people and organizations to balance program costs, schedule, performance, risk, and supportability requirements to effectively deliver warfighting capability at the speed of relevance.*

This competency is broken down and assessed at a deeper level through the **Educational Skill Requirements (ESRs)**— developed and validated with our major area sponsor together with faculty.

MSPM (836) and MSDPM (816) 's ESRs:

Graduates will:

1. **Identify and apply management fundamentals within the Department of Defense**: students will apply state of the art management techniques and concepts to problem solving and decision-making responsibilities.
2. **Identify and apply advanced leadership and management concept within the Department of Defense**: students will apply policy formulation and execution, strategic planning, defense resource allocation, project leadership, cost benefit and cost effectiveness analysis, federal fiscal policy, computer-based information, and decision support systems.
3. **Apply Program Leadership and Management Principles to the acquisition of major defense weapon systems**: students will apply principles of risk management and tradeoff decision analysis using Total Ownership Cost, schedule, and performance dynamics from a total life cycle management perspective.
4. **Apply and execute Program Management Policies within DoD and various federal agencies**: students will formulate and execute defense acquisition policies, strategies, plans, and procedures; know the policy-making roles of various federal agencies and the strategies necessary to influence policy development and implementation.
5. **Lead and manage system acquisition processes**: students will lead program teams and manage the systems acquisition process, the interrelationship between reliability, maintainability, and logistics support as an element of system effectiveness in Defense system/equipment design and embedded weapon system software.
6. **Recognize contracting processes within the acquisition environment**: students will recognize the role of the contracting process within the acquisition environment including financial, legal, statutory, technical, and managerial constraints in the process.
7. **Identify business theory and practices within the defense industry**: students will recognize the business and operating philosophies, concepts, practices, and methodologies of the defense industry regarding major weapon systems acquisition, particularly the application of sound business practices.
8. **Apply government and Industry Budgeting and Financial Management principles as well as private organizational financing**: students will apply the principles of government and private organizational financing (corporate financial structures, cost and financial accounting, capital budgeting techniques, financial analysis, and Defense financial management and budgeting processes to include the Planning, Programming, Budgeting Execution System (PPBES)).
9. **Master acquisition workforce fundamentals** through the acquisition management, program management and leadership fundamentals required for Defense Acquisition Workforce Improvement Act (DAWIA) acquisition professionals.
10. **Manage and lead Ethics and Standards of Conduct considerations within the defense acquisition**: students will manage and provide leadership in the ethical considerations of defense acquisition, provisions of procurement integrity, and can apply defense acquisition standards of conduct.
11. **Be proficient in analysis, problem solving, and critical thinking**: students will conduct research and analysis and show proficiency in presenting the results in writing and orally by means of an applied project and a command-oriented briefing appropriate to this curriculum.

Through the above ESRs we can also assess our students' level of learning on critical thinking, ethics, problem solving, resource management, and communications both written and spoken.

D.2.3: A chart for each degree or award that cross-references the program learning outcome with the GAC core areas of focus.

See Chart A in appendix 2 in section D.2. for the MSPM (836) and the MS in Defense Program Management (816). DDM acknowledges that it may not be normal for courses to cover all three GAC Core Areas of Focus: Technical Expertise, Professional Behavior, and Strategic Awareness. But with definitions of three Core Areas of Focus so broadly defined, we do believe course map to specific ESRs to address each of the areas. The courses integrate team lab exercises and case studies with supporting lessons and readings.

D.2.4: A chart for each degree or award that cross-references each course or subject with the program learning outcomes.

See Chart B in appendix 3 in section D.2. for the MSPM (836) and the MSDPM (816).

D.2.5: Description and evidence of how curricula facilitate student engagement including collaborative activities, integrative activities, and/or environments designed to enhance student learning.

- **Evidence is required. Evidence could include assignment prompts or course syllabi that demonstrate student engagement with the curricula content.**
- **During the site visit, the program will be asked to provide samples of student work that demonstrate the activities or environments that facilitate student engagement with the curricula content.**

Both curricula—MSPM (836) and MSDPM (816)— focus on leadership, problem solving and decision making within the acquisition environment utilizing case studies, teaming exercises, hands-on applications, active participation, and integrative exercises. Lecture and laboratory tasks require the application of critical thinking to problem solving within notional and actual situations. The curriculum is designed to provide graduates with the knowledge, skills, and abilities to manage and lead effectively in the federal government acquisition environment.

Both programs incorporate the Advanced Acquisition Studies academic certificate. Graduates earn fulfillment credit for the Defense Acquisition Workforce Improvement Act (DAWIA) required Defense Acquisition University (DAU) training for the Program Management Practitioner level certification.

Additionally, for both programs, each student submits a Course Evaluation Form (CEF) with both qualificative and quantitative feedback to the instructor (see appendix 28, section D.4) and a Student Exit Survey with recommendations for improvements in the curriculum (appendix 14, section D.2).

Below is a description with related appendices of some courses that show student engagement. In the MN4602 course, the students form integrated product teams (IPTs) to work to develop a test & evaluation strategy for micro-sized, autonomous unmanned aerial vehicle (UAVs) project. This project was first developed as an MSPM (836) student capstone applied project (CAP) and later written into the MN4602 course. The project is highlighted in course MN4602 syllabus (appendix 6 in section D.2) and appendix 4 for assignment instructions, a case overview documents from which the students worked on the project in IPTs, and a sample student team deliverables briefed out in the course.

In MN3384, students form teams to work in group exercises on Defense relevant projects. In week 2 on the lesson on understanding project requirements, for example, students work a real-world example writing the contract specifications for project requested by war-fighter for an individual weapon to shoot around corners.
Attached are the course MN3384 syllabus (appendix 6 in section D.2) and appendix 4A for assignment instructions, lab specifications, and sample student team deliverables.

In MN4307, student input continually adds to the development on lessons highlighting the importance of project acquisition strategies focused on agile methodologies, incremental development, and behavioral leadership/project management. Students work both individually and then as members of a project team on recommending risk appropriate acquisition strategy for a missile project. Attached is the course syllabus highlighting the assignments in

weeks 6 and 8, the assignment instructions and sample student team deliverables. The results are then combined and shared with the students to further lesson development. See course MN4307 syllabus in appendix 6 in section D.2 and appendices 4B and 4C for more documents such as case study, brief, instructions, and wrap-up.

D.2.6: Description and evidence of how curricula provide a summative experience(s) that incorporates the appropriate management of projects based on the knowledge, skills, and competencies acquired throughout the program.

- **Evidence is required. Evidence could include assignment prompts or syllabi that include the summative experience(s).**
- **During the site visit, the program will be asked to provide samples of student work that evidence the summative experiences.**

In the MSPM (836) curriculum at a foundational level, students take MN3301 and MN3302 that introduce project management and provide an opportunity to study how to manage a project end to end within a quarter.

I**n the MSDPM (816)** curriculum at a foundational level, students take MN3331 and MN3302 that introduce project management and provide an opportunity to study how to manage a project end to end within a quarter. Next in sequence, students take the advanced project management courses (MN3309, MN3384, MN4602, MN4470 and MN4307) that map an entire project lifecycle from critical acquisition sciences functional areas (software, manufacturing and quality, test & evaluation, logistics, and case studies) in which a more in-depth application of project management processes, collaborative teaming, leadership, and strategic awareness are emphasized at project, program, and portfolios levels.

Finally, at the capstone level, students in both programs select their own project (either research or product oriented) that will provide them with an individual opportunity to both demonstrate individual mastery of project management as well as contribute to the project management body of knowledge. In the 6th quarter, students select and scope their capstone research project and propose a project management plan in managerial inquiry class MN4045 for faculty advisor approval. In the 7th and 8th quarters, students execute their capstone research project under the guidance of their advisors. Students execute, control, and close their project, produce deliverables per project scope, summarize outcomes in a written technical report, and present their results via a student research poster and video supported by the Acquisition Research Program. These summative experiences produce a portfolio of work that demonstrates their ability to apply project management practices, leadership skills, and production of deliverables that align with strategic or operational objectives.

The Project Proposal Plan documents the project topic, problem statement, research questions, project objectives, research methodologies, and data sources. The results are then published as a technical report in the Acquisition Research Program and shared with the acquisition community via the Defense Acquisition Innovation Repository (DAIR) (see link: https://nps.edu/web/acqnresearch/dair). Students present their results in poster session at the annual Acquisition Research Symposium (see link: https://nps.edu/web/acqnresearch/symposium). Finally, the NPS Thesis Processing Office (TPO) publishes the capstone report in the NPS Library Calhoun database. (see link: https://calhoun.nps.edu/)

Refer to links below for an example of the typical student capstone research report:

- DAIR link: (https://dair.nps.edu/handle/123456789/4975);
- Calhoun link: (https://calhoun.nps.edu/bitstream/handle/10945/72232/23Jun_Morrill_Polnaszek.pdf?sequence=1&isAllowed=y); and
- Poster link: (https://dair.nps.edu/handle/123456789/4975). (See also appendix 4C in section D.2)

Additionally, a spreadsheet with links to the capstone projects of all the MSPM (836) and the MSDPM (816) students over the last five years is provided in appendix 5 section D.2.

D.2.7: Description of how curricula include academic content, rigor, and quality appropriate for the degree or award levels as noted in GAC Expected Levels of Academic Achievement.

- **Evidence is optional. Evidence could include assignment prompts or course syllabi that evidence the appropriate content, rigor, and quality for the degree or award level.**
- **During the site visit, the program will be asked to provide samples of student work that demonstrate the appropriate content, rigor, and quality for the degree or award level.**

Courses in the MSPM (836) and the MS in Defense Program Management (816) (matrix are taught in accordance with the academic standards approved in the NPS Academic catalog (link: https://nps.smartcatalogiq.com/en/current/academic-catalog/). Specifically the section under General Academic Information (link: https://nps.smartcatalogiq.com/en/current/academic-catalog/general-academic-information/) covers NPS learning objectives, NPS requirements for Master of Science degrees, course codes, course credit value, degree time limits, thesis format requirements, ESRs, grading, overload, validation, the honor code, and other standards.

Master of Science in Program Management (MSPM) 836 and the Master of Science in Defense Program Management (MSDPM) 816 both require:

1. Completion of a minimum of 48 credit hours of graduate-level courses, at least 12 which are at the 4000 level.
2. Completion of an acceptable capstone applied project, with at least one advisor from the Department of Defense Management.
3. Approval of the candidate's program by the Chair, Department of Defense Management.

Additionally, our programs are accredited by several accrediting institutions such as the Western Association of Schools and Colleges (WASC) Senior Colleges and Universities Commission that accredits the Naval Postgraduate School since 1955; the Association to Advance Collegiate Schools of Business (AACSB) that accredits our resident and distance learning MS in Management programs; and the Network of Schools of Public Policy, Affairs, and Administration (NASPAA)[2] that accredits our resident MS in Management programs.

[2] Since September 2023, our NASPAA accreditation is on hold. After changes mandated at both Navy and institutional level, some of our programs' public policy and administration content have changed.

D.2.8: A detailed outline for each course or subject (e.g., course description, learning outcomes, assessment methods, reading, and resources) relevant to the management of projects.

Refer to appendix 6, section D.2 for the MSPM (836) and the MSDPM (816) course syllabi. Each includes course description, course objectives, assignments also used for assessments, reading and resources.

D.2.9: Description and evidence of consistent delivery of curricula across all locations and delivery modalities including regular, substantive interactions between faculty and students.

- **Evidence is required. Evidence could include policies or processes to assure consistent delivery of the curricula, or student achievement data that demonstrates the consistency of the curricula.**

All MSPM (836) and MSDPM (816) courses are assigned course coordinators that ensure instructors consistently deliver course content meeting course learning mandatory objectives that are tied to the programs' educational skill requirements and the program objectives. Each course has at least one mandatory objective that supports at least one program competency listed in the syllabus; courses can have additional discretionary objectives. Mandatory objectives must be taught by any instructor who delivers the course to ensure consistency across the program.
The course coordinators ensure that any instructor who teaches the course is aware of the mandatory objectives.
We use mandatory objectives to perform assessment of students' learning (see appendix 7, section D.2)
Lessons, exercises, case studies, and exams are reviewed for consistency across course syllabi. Additionally, each program has a faculty member who is assigned as the Academic Associate for the degree who coordinates the assignment of instructors and ensures the course learning objectives align with program ESRs.

D.2.10: Description and evidence of how stakeholders are involved in the curricula continuous improvement process.

Of particular importance are the biennial Curricula Reviews (CR), which are required by NPS directive to promote continuous improvement in each specialty curriculum. Far beyond typical employer surveys, these reviews are conducted by designated sponsors, who are typically senior government leaders (flag-level military officers or Senior Executive Service civilians) for which we designed our programs and to which our graduates will be assigned following graduation. Sponsors meet with faculty and the administration to review and assess their curricula against the core educational skill requirements that the sponsor believes our graduates need for success in their future jobs. The outcomes of these sponsor-faculty collaborations are course- and program-level recommendations for improvements.

The major area sponsor for the MSPM 836 and the MSDPM (816) degrees is the Office of the Assistant Secretary of the Navy for Research, Development, and Acquisition [ASN(RDA]. Attached is the memorandum of agreement (MOA) between NPS and ASA(RDA) that outlines the curricula review requirements. On summer 2023, an additional MOA between NPS and the Sponsor highlighted the requirement of annual curriculum reviews instead of biennial (see appendix 8 in section D.2). The last MSPM 836 and the MS in Defense Program Management (816) major area sponsor curriculum review was conducted at the Pentagon in December 2023. Appendix 9 in section D.2 provides an example of curriculum review document. The next sponsor curriculum review will take place in 2024.

The Curriculum Review (CR) process flows from NPS' mission of providing relevant and unique advanced education and research programs to increase the combat effectiveness of commissioned officers of the naval service to enhance the security of the United States. (link: https://nps.edu/web/accreditation/curriculum-review)

To accomplish that mission, the educational programs are structured around specialized programs of study (curricula) that fulfill the present and future defense-focused graduate education needs of the defense community. The various curricula are designed to educate officers in specific Educational Skill Requirements (ESRs), which define the knowledge and skills a graduate should possess to function effectively as a professional in a given area of specialization.

External sponsors exist for most NPS curricula and ESRs for a program are developed by sponsors in conjunction with

NPS. The primary purpose of the CR process is to assess the degree to which the curriculum retains high academic quality and alignment with the mission of NPS as well as the needs of its sponsor. This process validates or modifies ESRs as required; addresses joint stakeholder requirements; and identifies academic degree requirements that may be independent of the ESRs. This comprehensive review focuses on both the design and execution of the curriculum. Beyond the specific content of the curriculum, the CR process examines a department's capacity for providing a quality program, including issues related to faculty, research programs, and resources. The curriculum review is a biennial process with the content of each curriculum assessed every two years. The review occurs through a structured sequence of events including: the review of courses and content of curricula; checking the alignment of course outcomes with the curricular ESR; interviews with students, staff, and faculty; and review of faculty and thesis research in the department.

Through encouragement from our faculty and support from our sponsors, students complete a capstone thesis/project with practical and/or theoretical defense relevance. Capstone projects are advised by full-time faculty members. Students and their faculty advisors each benefit through the capstone research process; this provides us with strong evidence of mission accomplishment.

Administrative staff members both at NPS and DDM level support students in providing general program information, academic admission, completion requirement. Our Information Technology and Communications department supports both our distance learning and resident students with remote access, emails, network, academic applications, and many other services. (See links: https://nps.edu/web/technology; https://online.nps.edu/resources/student-guide; and https://online.nps.edu/resources for admission, tuition, registrar, etc..)

Innovation Capstone Project

A recent initiative at DDM is the Innovation Capstone Project (ICP) for residents and DL students. The ICP is an entrepreneurship program that is grounded in evidence-based practices and is designed to promote experiential learning. It takes inspiration from the Lean LaunchPad/Hacking for Defense approaches and integrates topics related to Naval acquisition. The ICP enables student lead teams of military officers, mentors, and industry partners to develop solutions that can transition from an idea to the warfighter for real-world capability needs. Team teaching and mentors from the DDM faculty are vital components to successful ICP execution.

a) MN4044 course instructor(s) can come from any of the five instructional areas under DDM. The ICP Program Manager will collaborate with the Assistant Chairs to determine MN4044 workload planning.

b) MN4090 will require one faculty mentor per ICP team proficient in the Lean LaunchPad/Hacking for Defense methodologies. The ICP Program Manager will solicit faculty mentor participation and provide the required training. The ICP mentor is expected to dedicate 1-2 hours weekly throughout the MN 4090 courses. The faculty mentor's time counts towards fulfilling the department service requirement. Link for the ICP: https://nps.edu/web/ddm/innovation-capstone

D.2.11 to D.2.11.3: Description and evidence provided in a chart of how the achievement of program learning outcomes are assessed for each academic degree or award using direct and indirect measures of assessment. The description must include:

- **Provide a chart documenting the assessment process, an analysis of the data showing the extent to which students have achieved the GAC core areas of focus for the program learning outcomes, and the use of data for continuous improvement. The program may use a template required by the institution or the GAC Program Learning Outcomes Assessment Chart Template.**

DDM ASSESSMENT PROCESS

DDM uses both direct and indirect assessments of student learning in its resident and non-resident degree programs.

Our direct assessment program and its evolution during the AY2020-2023 are described below.

DDM Assessment of Student Learning, 2020–2022. Our direct assessment program during these years followed the program level assessment process DDM established in 2018. Degree program goals were referred to as "competencies", with their wording aligned more closely with our other accreditations (AACSB and NASPAA) standards to simplify our assessments. Also, we assessed the course mandatory objectives (those that must be taught in all sections, regardless of the instructors who teach the sections) that support each of our programs' competencies. This resulted in a set of well-defined course level assessments.

All the courses in the MSPM and the MSDPM curricula are mapped to the program competency and objective. Courses include specific assessment tools including individual and team assignments, homework assignments, case studies, papers, exams, in-class exercises, simulations, projects, and discussion. This approach allows us to see the degree to which each course addressed the program competency and objective; 2) whereas the course was offered in the earlier or later quarters in the program; 3) whereas the course contained a potentially appropriate assessment event; and 4) whereas the course offered a potential lever to adapt our curricula if students were not achieving a specific learning goal. Course Coordinators responsible for each specific course's content and mandatory objectives. Faculty decided on a benchmark acceptable % of students that *do not meet, meet, or exceed expectations*. The learning targets levels were approved as follow:

- ≥ 20%: Do not meet expectations.
- = 80-85%: Meet expectations.
- ≥ 85%: Exceed expectations[3]

The programs have a designated faculty member who serves as their Academic Associate (AA). The AA manages the curriculum's delivery, serves as the principal academic advisor for students in the curriculum, and serves as the primary liaison with the curriculum sponsor. The AA ensures alignment of specialty courses to satisfy degree requirements and educational skill requirements as agreed upon with the sponsor.

The DDM Chair committee exercises faculty governance in instructional matters, reviews changes to programs and courses, reviews and makes recommendations on new programs and courses, approves/resolves minor changes/issues, and frames major changes/issues for decision and resolution for the faculty in general.

The NPS Academic Council has representatives from each academic unit on campus and exercises curriculum governance at the university level.

[3] In this instance, we also review courses and assignments to make sure the standards are not too low.

Analysis of data: The Acquisition and Program Management area will analyze results together with relevant faculty (i.e., AC, AA, CC, and Instructors).

Implementation: After its analysis, the Acquisition and Program Management faculty will decide on changes to be implemented in the program (if needed).

Closing the Loop: To ensure program improvements, both minor and major, secondary data will be collected tracking where improvements have been implemented. The FA-AA will provide the Acquisition and Program Management Area with this new data and a Closing the Loop Memo. The relevant faculty will consider the assessment results along with indirect assessments to determine further appropriate actions to be taken (if needed). The assessment cycle continues forward by assessing the same competency, beginning a new loop. (see appendix 10 in section D.2: Assessment Process and Framework)

Challenges during 2020-2022.

During this time, the convergence of unforeseen challenges like COVID-19 forced us to abruptly shift to remote learning environments, causing delays, and disrupting the usual timeline for assessing programs and tracking student progress — to unexpected organizational change, and limited resources— like institutional-level budget reductions, downsizing, and restructuring from the Graduate School of Defense Management to the Department of Defense Management (DDM)— introduced campus-wide uncertainty regarding the longevity of programs and curricula. Specifically, the uncertainty with path forward caused DDM's faculty to halt its programs' assessments for three quarters from Winter to Fall 2022.

DDM Assessment of Student Learning, 2023.

At the end of 2022 and beginning of 2023, with these challenges behind, DDM was able to resume the assessment of student learning and focus on some aspects of the assessment process that needed further development and monitoring.

Changes to the MSPM (836) and the MSDPM (816).

In the specifics, after review of the MSPM program, the Acquisition and Program Management faculty decided to eliminate the core competency and objective previously established for the two DL programs (Program Management and Contract Management) and refine the competency and objective of each program individually. The rationale behind this change is explained by the fact that the Program Management and the Contract Management programs are fundamentally different degrees, with different courses, and different educational skill requirements that do not really share a common core of courses if not for a very few courses.

Another change is the use of Educational Skill Requirements[4] (ESRs) to measure our student's knowledge and skills of the programs. The current standard rubric used by the MSPM (836) and the MSDPM (816) program faculty now reflects these ESRs, and students are assessed according to these traits. (see appendix 11 in section D.2)
Reasons for this change were:

1) To better reflect assessments at program level, expectations, and students' performance.

2) To offer faculty opportunities to better identify learning goals in their courses and ensure that these goals correspond to the school's mission, to the sponsors, to the students' needs, and the needs of the community we serve at large.

3) To provide accountability to all the stakeholders involved in the process with clear evidence of student outcomes and what our programs hope to achieve.

Figures 2 and 3 below show the revision of the program competency and objective for the MSPM (836) and the MSDPM (816) curricula.

Figure 2. MSPM (836)

Program Competency and Objective 2020-2022		**Program Competency and Objective 2023**
Core Program Competency: Our graduates will be effective managers within DoD and the federal government environment. **Core Program Objective:** Our graduates will utilize their knowledge of analytical techniques to increase the efficiency and effectiveness of the management process.		
Program Competency: Our graduates will be effective program managers. **Program Objective:** Our students will utilize their business acumen and program management knowledge to be effective leaders in the federal acquisition workforce.		**Program Competency:** Our graduates will be effective program managers and leaders of people and resources within DoD organizations. **Program Objective:** Our graduates will lead people and organizations to balance program costs, schedule, performance, risk, and supportability requirements to effectively deliver warfighting capability at the speed of relevance.

[4] Educational Skills Requirements (ESRs) are a set of skills agreed upon between the sponsor and NPS, and which serve as the basis for educational objectives in the curriculum.

Figure 3. MS in Defense Program Management (816)

Program Competency and Objective 2020-2022		Program Competency and Objective 2023
Program Competency: Our graduates will be effective program managers. **Program Objective:** Our students will utilize their business acumen and program management knowledge to be effective leaders in the federal acquisition workforce		**Program Competency:** Our graduates will be effective program managers and leaders of people and resources within DoD organizations. **Program Objective:** Our graduates will lead people and organizations to balance program costs, schedule, performance, risk, and supportability requirements to effectively deliver warfighting capability at the speed of relevance.

In addition to the rubric, we developed an Assessment Result Form (ARF) to aggregate the results from each dimension of the rubric and summarize the results of the assessment. An example of the ARF is shown in appendix 12, section D.2.

Major curriculum changes outside of direct assessment.

Tables 4 and 5 below summarize the major curriculum changes made in the last three years primarily outside of our assessment of student learning program for the MSPM (836) and the MSDPM (816) programs.

Table 4. MSPM (836)

AY	Change	Motivating Factors
2021	Added MN3302 Advanced Project Management as a required course for 836 students.	In response to sponsor, stakeholder, and student feedback for an additional class focused on advanced PM principles in addition to MN3301 which introduces basic PM principles.
2022	Added MN4045 Managerial Inquiry as a required course before students take MN4090 Capstone Project Research courses.	In response to a high percentage of distance learning students requiring a thesis extension to complete the required capstone applied project.
2023	Integrated two pass/fail directed study courses MN4900 for PMP preparation	In response to the student demand. Also supports the DoD in aligning DAWIA certification standards and requirements to industry accepted PMI standards for project, program, and portfolio management and PMP designations.
2023	Eliminated core program competency and objective	After discussion, the PM and the CM faculty decided to eliminate the core competency due to the programs being different.
2023	Revised and re-aligned MSPM competency and objective.	PM faculty; after revision of the competency and objective in early 2023.

Table 5. MS in Defense Program Management (816)

AY	Change	Motivating Factors
2021	Added MN3302 Advanced Project Management as a required course for 816 students.	In response to sponsor, stakeholder, and student feedback for an additional class focused on advanced PM principles in addition to MN3331 which introduces basic PM principles. MN3302 was a recommended elective previously.
2022	Changed curriculum from an 18-month MBA to a 12–18-month MS in Systems Acquisition Management	Under direction by the Department of the Navy to focus NPS degrees in DDM from general MBAs in MS in operationally relevant focused areas, like program management, contract management, financial management, logistics management and manpower management
2022	Added MN4044 Managerial Inquiry and Innovation Capstone Lab as a required course before students take MN4090 Capstone Project Research courses.	In response to student feedback which indicated that taking a managerial inquiry class improved the capstone research experience and improved the student understanding of the Thesis Processing Office policies and procedures.
2022	Aligned the curriculum (course matrices, program objectives, ESRs) for the resident 12-month MS SAM degree with the 24-month MSPM Distance Learning degree.	Allowed for the same courses to be taught both in residence and via distance learning. Gained efficiencies in faculty coverage for teaching schedules.
2023	Integrated two pass/fail directed study courses MN4900 for PMP preparation	In response to student demand. Also supports the DoD in aligning DAWIA certification standards and requirements to industry accepted PMI standards for project, program, and portfolio management and PMP designations.

Direct Assessment Results and Closing the Loop.

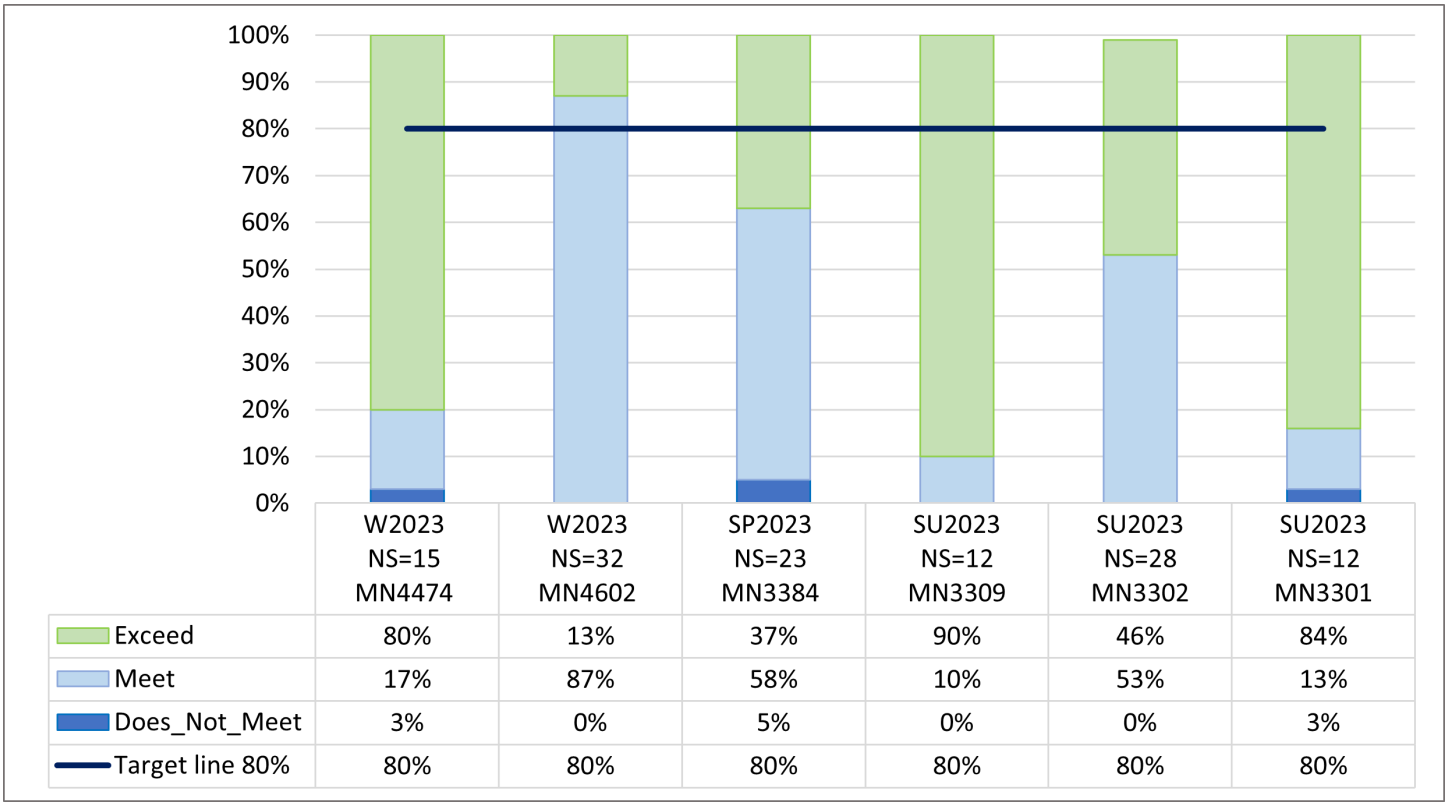
Our direct assessment process for the MSPM (836) and the MSDPM (816) programs is illustrated in appendix 13, section D.2. The tables in the appendix show the quarters and courses in which we assessed the competency, the results of the assessment, and the loop closing process over time.

Figures 4 and 5 below show the trend from direct assessments in 2023 for the MSPM (836) and the MSDPM (816) curricula. Quarters and academic year the assessments were performed, the number of students (NS) and the courses (number) used to assess the students are also indicated.

Program Competency Assessed: *Graduates will be effective program managers and leaders of people and resources within DoD organizations.*

Program Objective Assessed: *Graduates will lead people and organizations to balance program costs, schedule, performance, risk, and supportability requirements to effectively deliver warfighting capability at the speed of relevance.*

Figure 4. MSPM (836)



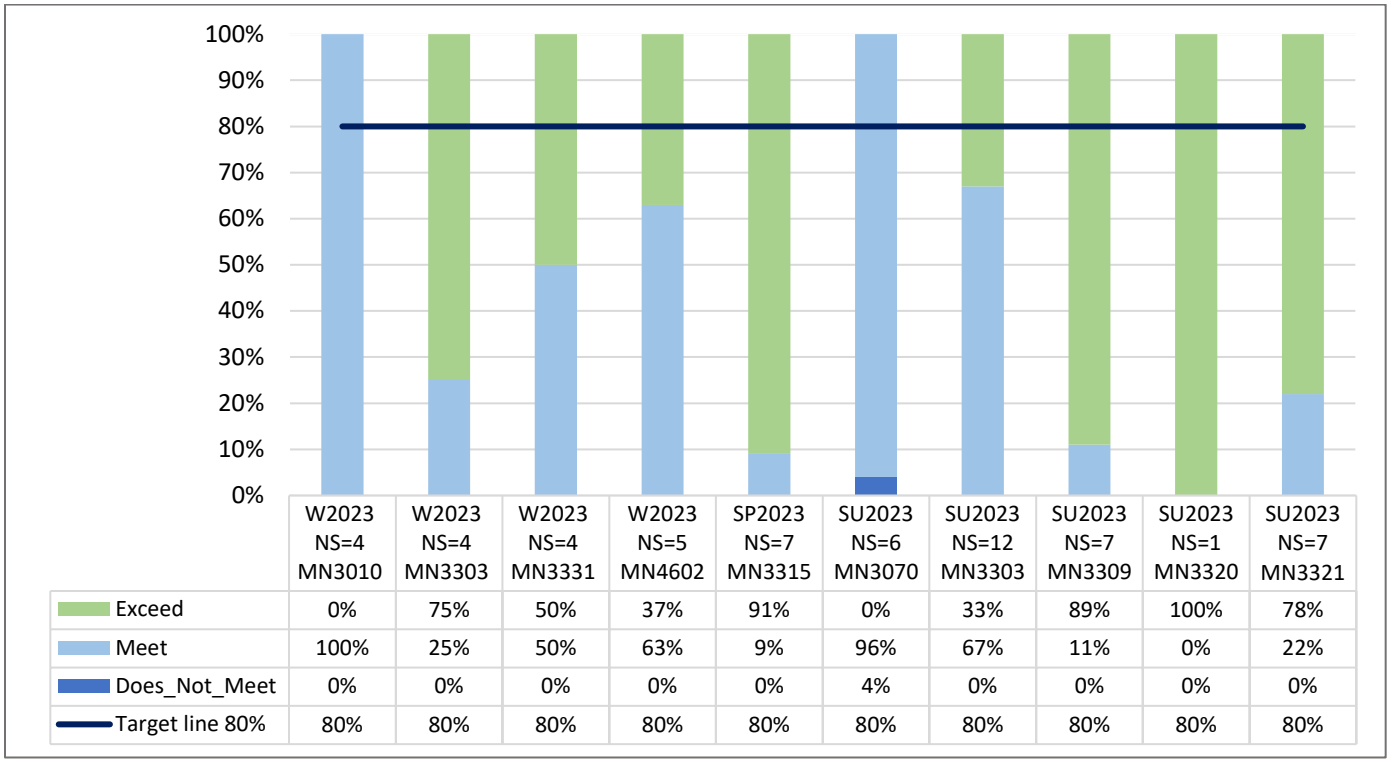
	W2023 NS=15 MN4474	W2023 NS=32 MN4602	SP2023 NS=23 MN3384	SU2023 NS=12 MN3309	SU2023 NS=28 MN3302	SU2023 NS=12 MN3301
Exceed	80%	13%	37%	90%	46%	84%
Meet	17%	87%	58%	10%	53%	13%
Does_Not_Meet	3%	0%	5%	0%	0%	3%
Target line 80%	80%	80%	80%	80%	80%	80%

Source: NPS—Department of Defense Management. Direct Assessment Data Trend 2023.

Results

While the performance target was exceeded a few assessments showed a small percentage of students who did not meet expectations. Followed-up research indicated in one case a lack of preparation from the students and in the other cases, some improvement needed in theory, practices, and critical thinking. Further discussion among the PM area indicated that students will be able to improve these issues over the span of the program.

Figure 5. MS in Defense Program Management (816)



	W2023 NS=4 MN3010	W2023 NS=4 MN3303	W2023 NS=4 MN3331	W2023 NS=5 MN4602	SP2023 NS=7 MN3315	SU2023 NS=6 MN3070	SU2023 NS=12 MN3303	SU2023 NS=7 MN3309	SU2023 NS=1 MN3320	SU2023 NS=7 MN3321
Exceed	0%	75%	50%	37%	91%	0%	33%	89%	100%	78%
Meet	100%	25%	50%	63%	9%	96%	67%	11%	0%	22%
Does_Not_Meet	0%	0%	0%	0%	0%	4%	0%	0%	0%	0%
Target line 80%	80%	80%	80%	80%	80%	80%	80%	80%	80%	80%

Source: NPS—Department of Defense Management. Direct Assessment Data Trend 2023.

Results

The performance target exceeded expectations. The 4 percent in the category “Does Not Meet Expectations”, it is not particularly concerning as it is due to a single student’s issue with two specific ESRs such “Management Fundamentals” and “Advance Leadership and Management Concepts”. The instructor took action to amend the problem set used in the assessment and in the next iteration of the course will also ask students to explain their findings beyond numerical expression to better evaluate their understanding of topics and concepts.

DDM Internal Assessment of capstone projects— 2021-2023.

Considering the idiosyncrasies of capstone projects, our assessment approach focuses on two Education Skill Requirements (ESRs) derived from the programs’ competency and objective. These ESRs— *Management Fundamentals* and *Analysis, Problem Solving, & Critical Thinking*— are consistently integral to all our capstones and provide a basis for evaluation across diverse project contexts.

While results from these assessments indicated that students in both programs are meeting the objective and reaching the benchmark established, students in the 836 program show a higher overall performance in “Meeting Expectations”; however, students in the 816 program show a remarkable strength in "Exceeding Expectations” across both competencies. (See figures 6 and 7 below)

Figure 6. MSPM (836)

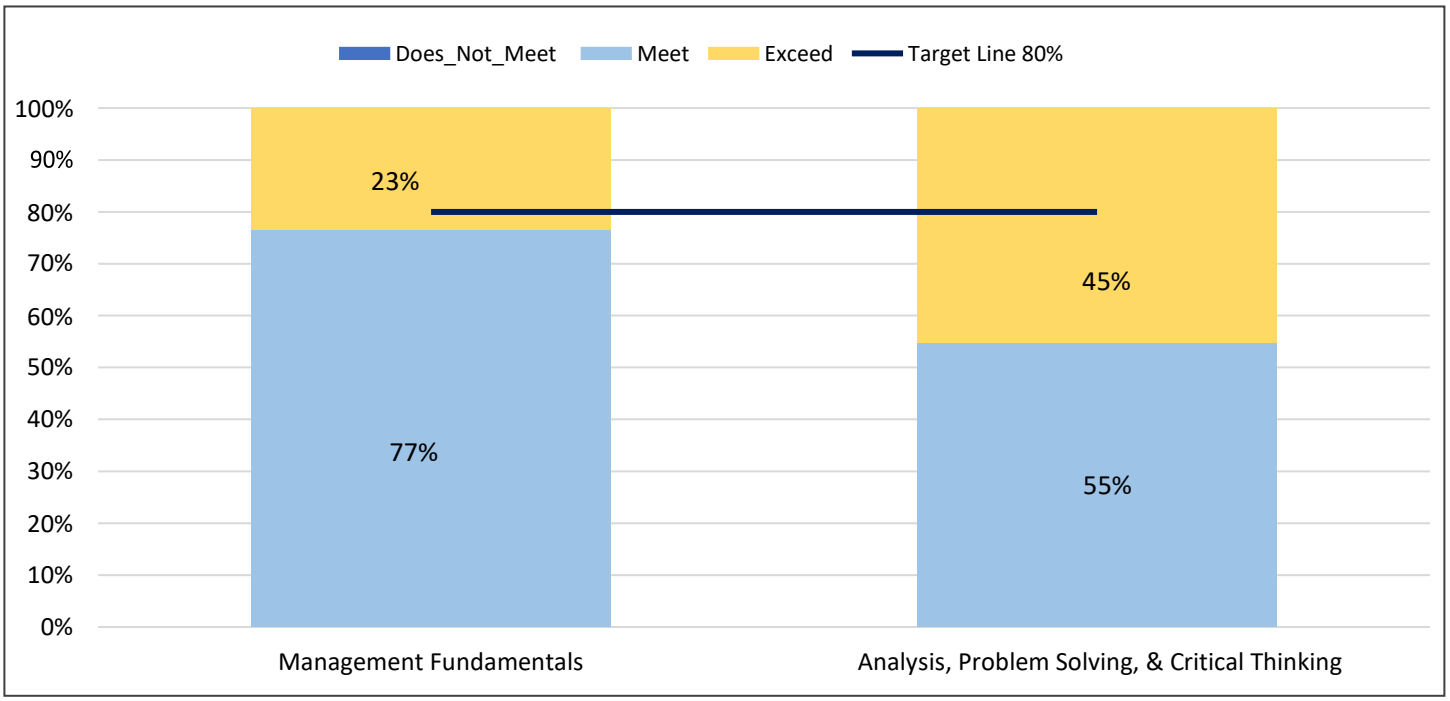
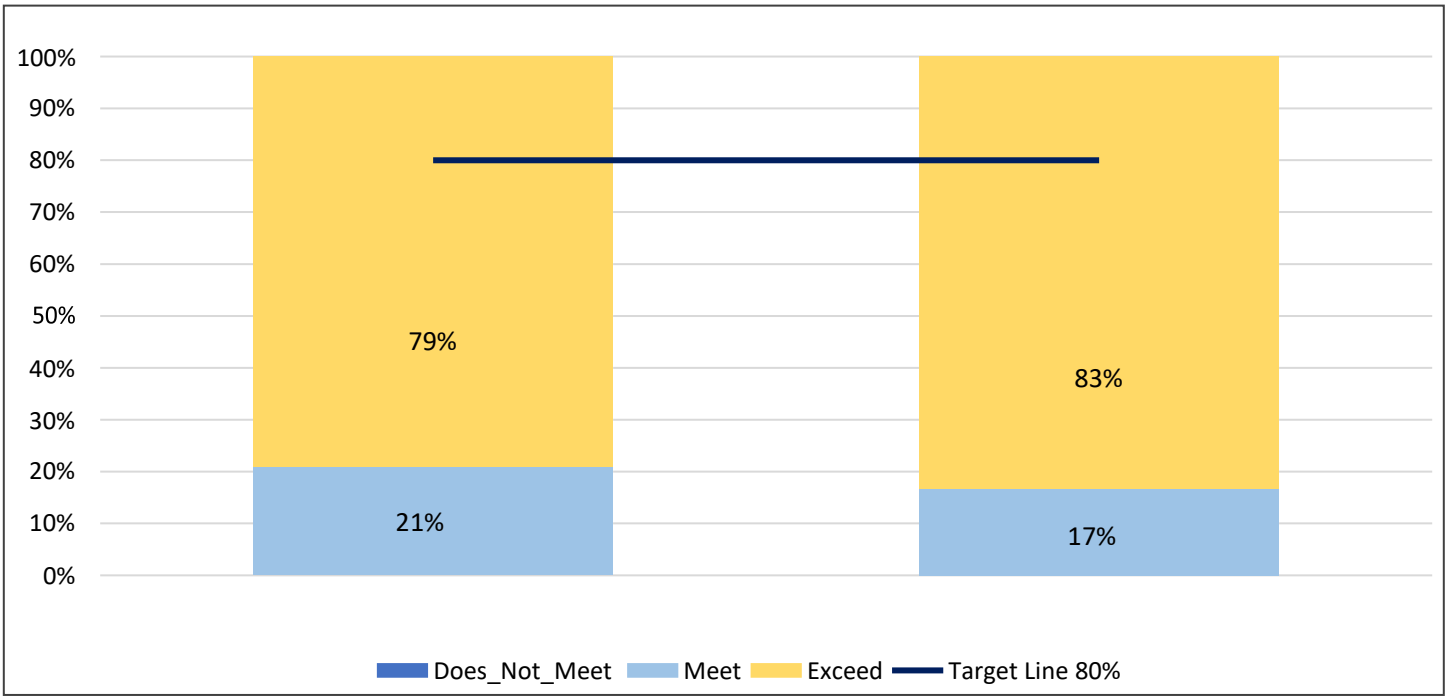


Figure 7.MS in Defense Management Program (816)



INDIRECT ASSESSMENT

Our indirect assessment suite includes Sponsor Curricula Reviews, Student Feedback Sessions, Student Opinion Forms for each course offering, Capstone Project Assessment Survey, Entrance and Exit Surveys for graduates.

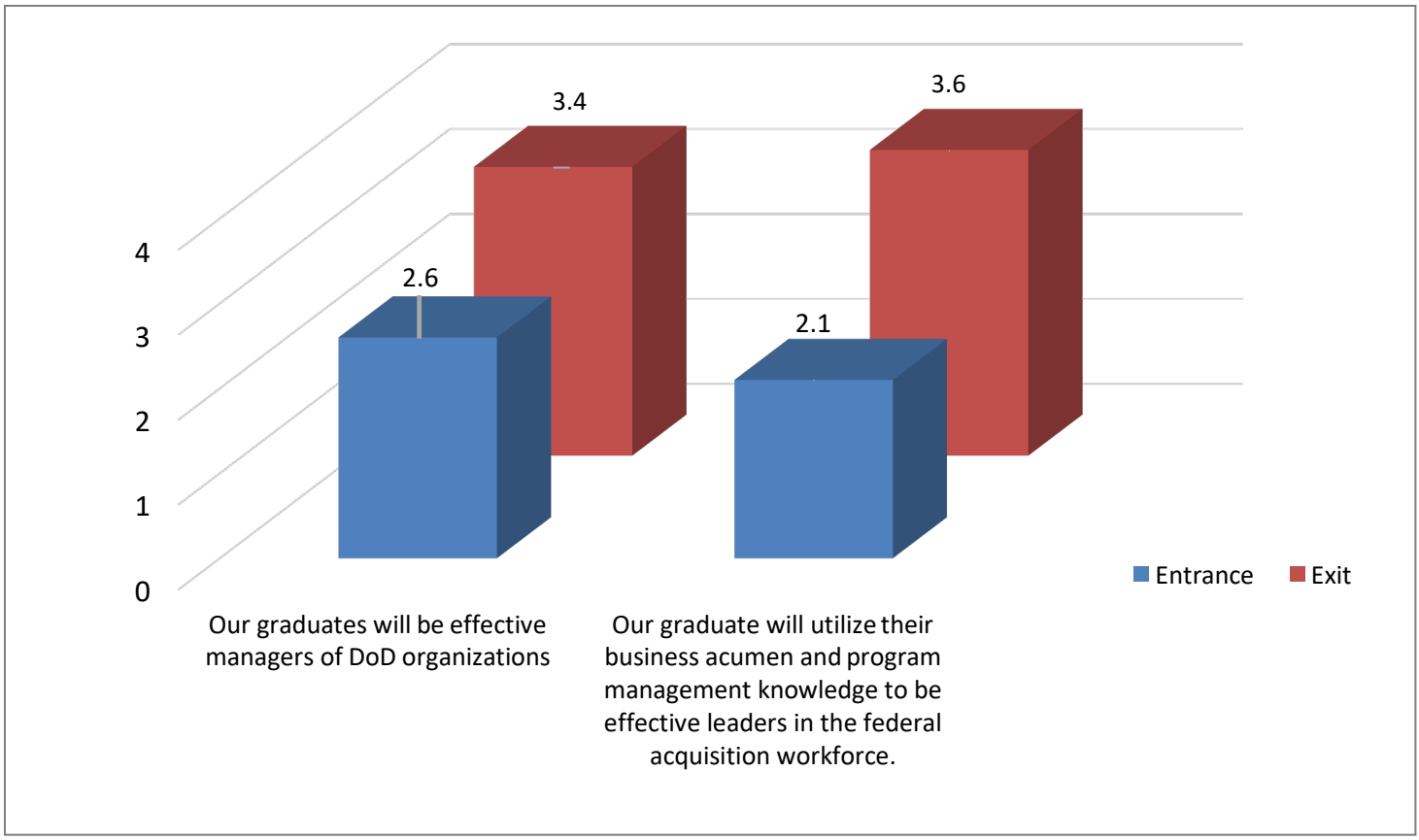
Sponsor Curriculum Reviews

Please refer to narrative in section D.2.10 above.

Surveys: Another example of our use of indirect assessment processes is the administration of entrance surveys to incoming students and exit surveys to graduating students. In these surveys, we ask students to rate their knowledge, skills, and abilities in their degree program competencies. Comparing entrance and exit survey results will provide us with additional evidence upon which to base curriculum improvements.

Figure 8 is an example of the results from a cohort of incoming students in MSPM (836) who entered the program in July 2021 and graduated last year in June 2023[5].

Figure 8. Student Entrance Survey



4-point Likert Scale used: 1=Poor, 2= Satisfactory, 3=Good, 4=Excellent
Source: NPS—DDM Entrance/Exit Student Surveys. 2021-2023 data.

[5] At the time of this survey, we still had the older program competencies: the core and the MSPM (836) specific competencies. As mentioned in this

report, in late 2022 and starting in Winter 2023 the core competency was eliminated, and the MSPM (836) specific competency was revised.

As we expected, and hoped, the results show higher scores for graduates than for incoming students. As we gather more data with these surveys, we will be able to develop meaningful goals (e.g., on average, how much competency improvement do we seek?) and interpretations of survey results.

In the same survey we also ask a set of questions related to students' experience with distance learning delivery teaching, students' resources, capstone/thesis, and overall satisfaction with the program (see appendix 14, section D.2). For this survey, the students answered positively and respectively as follows: 96% agreed; 94% agreed; 80% agreed; and their overall satisfaction with the program was 100%.

Additionally, in the past year we have revised our students' entrance and exit surveys to include our ESRs in both MSPM (836) and MSDPM (816). Due to these changes, we could not gather a substantial amount of data to measure the students' acquired skills before and after graduation. Under the new surveys, collection of data for the MSPM (836) program will start in July 2024 (entry data) while the collection of data for the MSDPM (816) program started in January 2024. We will be able to compare and analyze the first set of results respectively in December 2025 and June 2025.

Up to 2023, for MSDPM (816) we did not collect data specific to this program. As part of our MBA, entry and exit data from students in this curriculum were collected with students enrolled in other curricula under our MBA program. Moreover, our MBA program addressed different program competencies and objectives. Currently, the data available from the MS in DPM (816) are combined with data of students from other curricula (also under our previous MBA program) and therefore provide us with limited information on our MSDPM (816) students. The new surveys will provide us with more specific feedback on our 816 students' performance.

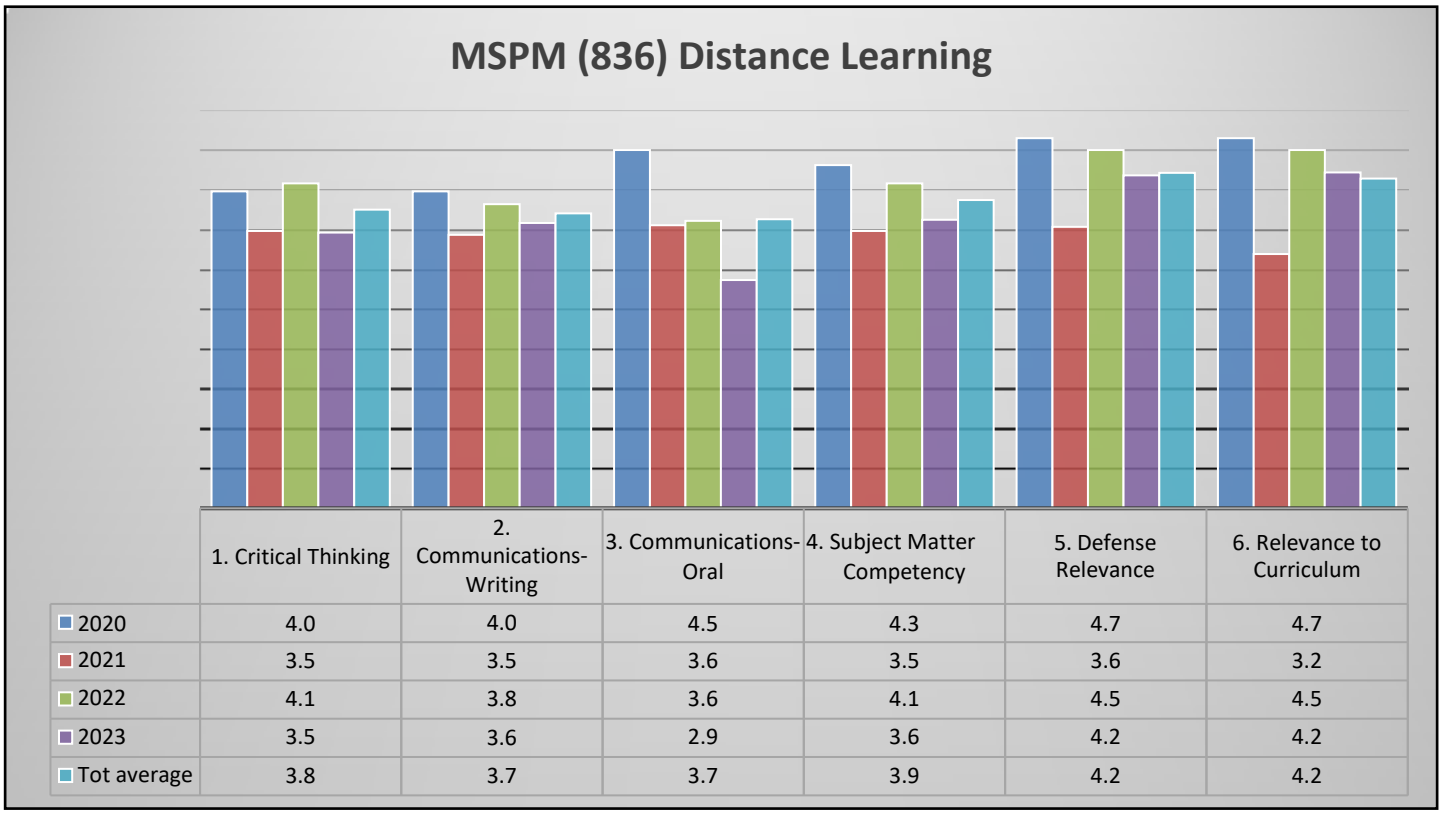
Another initiative in our indirect assessment processes is the review of NPS thesis/capstone data gathered at institutional level by the NPS Institutional Research department. Within NPS, all departments and programs conduct formal capstone assessments for the purpose of assessing program learning outcomes and initiating program improvement. NPS employs a set of program outcomes that are broadly similar across all NPS' master's degree programs. The thesis/capstone assessment is filled out when faculty members approve the thesis or final project report and represents an opportunity to comment on the degree to which students demonstrate achievement of learning objectives set for their programs. DDM performs internal analysis of the assessment results from NPS thesis/capstone by curricula and by residents and non-resident programs for six out of the eight competencies assessed at institutional level. Results are also compared with other direct and indirect assessment results and possible discrepancies discussed and addressed by the Acquisition and PM faculty.

NPS thesis/capstone competencies:

Subject Matter Competence: Student(s) demonstrates graduate-level knowledge and competencies in the/their academic field.
*Methods and Technical Merit: Student(s) demonstrate the ability to apply technical expertise and appropriate methodological rigor in conducting research and analysis. * DDM does not assess this competency; however, it is assessed at institutional level.
Critical Thinking: Student(s) demonstrates the ability to apply critical thinking and logical reasoning to research questions and to implement creative or innovative approaches to answer them.
Written Communication: Student(s) demonstrates proficiency in communicating and presenting the written results of the/their inquiry in a thesis or final project report appropriate to the/their academic program
Oral Communication (optional): Student(s) demonstrate proficiency in communicating and presenting the results of the/their inquiry in a thesis or final project report in an oral presentation. (Note: this dimension is optional – complete if it applies to your curriculum or department.)
Defense Relevance: The thesis or final project addresses a problem of relevance in the defense or national security community.
Relevance to Curriculum: The thesis or final project is closely aligned with the student's assigned curriculum.
**Potential for Publication ** DDM does not assess this competency; however, it is assessed at institutional level.

Figures 9 and 10 below show the results of these assessments from AY2020 to AY2023 for the MSPM (836) and the MS in Defense Program Management (816).

Figure 9. Assessment Trend



	1. Critical Thinking	2. Communications-Writing	3. Communications-Oral	4. Subject Matter Competency	5. Defense Relevance	6. Relevance to Curriculum
2020	4.0	4.0	4.5	4.3	4.7	4.7
2021	3.5	3.5	3.6	3.5	3.6	3.2
2022	4.1	3.8	3.6	4.1	4.5	4.5
2023	3.5	3.6	2.9	3.6	4.2	4.2
Tot average	3.8	3.7	3.7	3.9	4.2	4.2

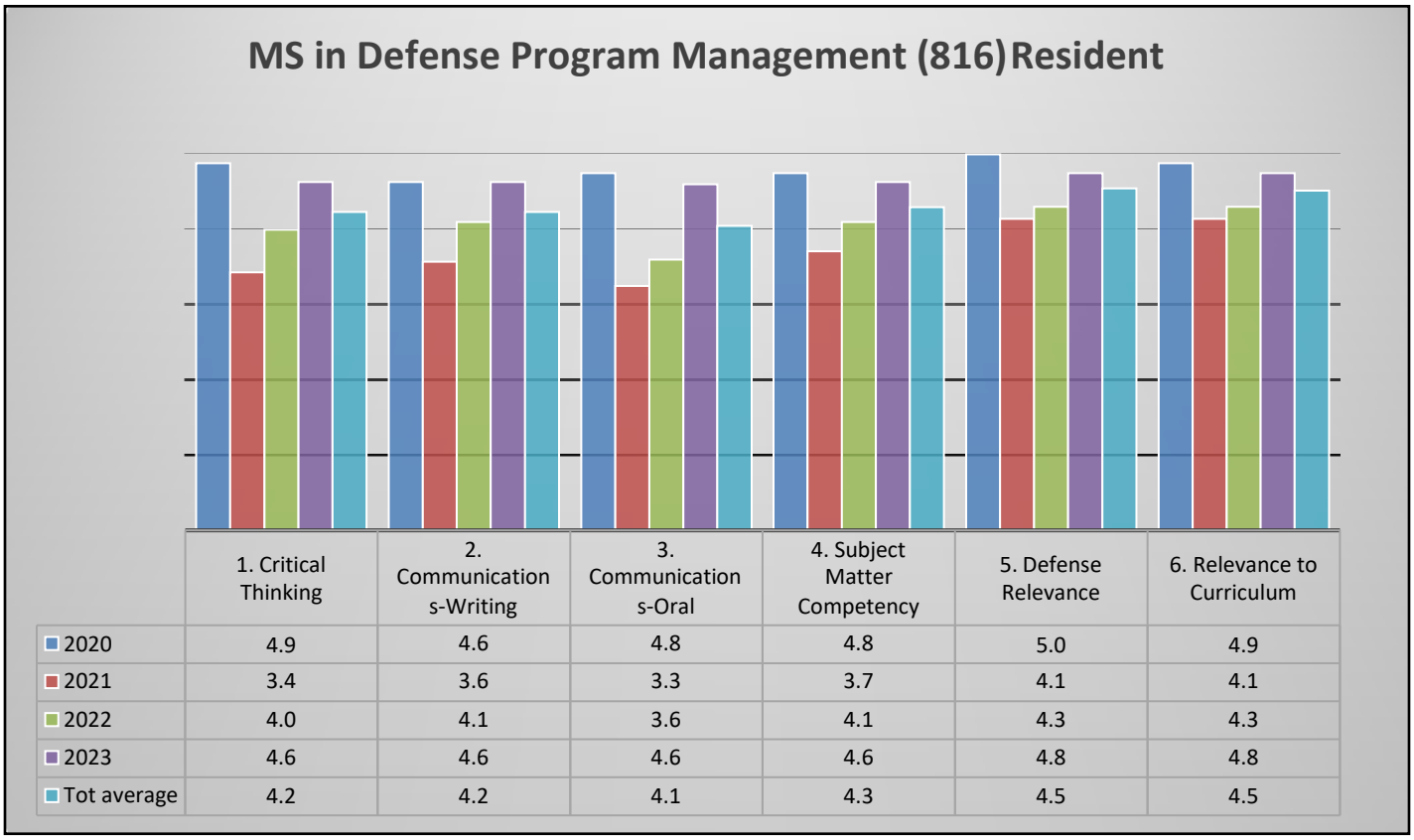
5=Advanced; 4=Nearing Advanced; 3=Proficient; 2=Nearing Proficient; 1=Acceptable (competencies 1-4)
5=Fully Relevant; 4=Highly Relevant; 3=Relevant; 2=Minimally Relevant; 1=Not Relevant (competencies (5-6)

Results show that overall average scores for the MPSM program remain in the high "proficiency" range in all the competencies.

The Curriculum dimension reflects the students' ability to apply their skills and knowledge to a problem that relates directly to their curriculum. The Defense dimension reflects the students' ability to address a problem of relevance to the defense or national security community.

The higher learning outcomes scores in the program in the past 4 years were Subject Matter Competency, Defense Relevance, and Relevance to Curriculum, with respectively an overall score of (3.9), (4.2), (4.2), indicating that student thesis/Capstone projects are very relevant to defense and to their curriculum.

Figure 10. Assessment Trend



	1. Critical Thinking	2. Communication s-Writing	3. Communication s-Oral	4. Subject Matter Competency	5. Defense Relevance	6. Relevance to Curriculum
2020	4.9	4.6	4.8	4.8	5.0	4.9
2021	3.4	3.6	3.3	3.7	4.1	4.1
2022	4.0	4.1	3.6	4.1	4.3	4.3
2023	4.6	4.6	4.6	4.6	4.8	4.8
Tot average	4.2	4.2	4.1	4.3	4.5	4.5

5=Advanced; 4=Nearing Advanced; 3=Proficient; 2=Nearing Proficient; 1=Acceptable (competencies 1-4)
5=Fully Relevant; 4=Highly Relevant; 3=Relevant; 2=Minimally Relevant; 1=Not Relevant (competencies (5-6)

Results indicate that average scores for MSDPM (816) are in the high "proficiency" ranges in all the competencies.

The Curriculum dimension reflects the students' ability to apply critical thinking and problem solving directly to their curriculum as well as being able to formulate, draft, and present problems and recommendations to different audiences. Subject Matter Competency reveals advanced students' aptitude to address issues related to defense or national security concerns.

The higher learning outcomes scores in the program in the past4 years w ere Defense Relevance and Relevance to Curriculum, with both an overall score of (4.5), indicating that student thesis/capstone projects are very relevant to defense and to their curriculum.

D.3 Program Information Integrity

The program ensures that students and the public have access to accurate information about academic degrees or award to make informed decisions. The program shall provide accurate, consistent, and verifiable information about the academic degree or award to students and the public.

To demonstrate that the above standard is met, the program shall submit the following:

D.3.1 : Description and evidence of the communications provided to the public and relevant individuals about the academic degree or award.

- **Evidence is required. Evidence could include the program website and any other published digital or print information regarding the program including program information in a catalog, prospectus, flyer, and/or brochure.**

General information on our academic degree programs—the Master of Science in Program Management (836) DL and the MS in Defense Program Management (816) Resident can be accessed through the following media:

Links:

Naval Postgraduate School Website: Naval Postgraduate School - Naval Postgraduate School (nps.edu)

Department of Defense Management Website: Mission and Vision: About - Department of Defense Management - Naval Postgraduate School (nps.edu)

Department of Defense Management Website: Master of Science in Program Management (836) DL: Curriculum 836 - Department of Defense Management - Naval Postgraduate School (nps.edu)

Department of Defense Management Website: MS in Defense Program Management (816) Resident: Curriculum 816 - Department of Defense Management - Naval Postgraduate School (nps.edu)

Department of Defense Management Student Resources: DAWIA Training - Department of Defense Management - Naval Postgraduate School (nps.edu)

Department of Defense Management Research: Research - Department of Defense Management - Naval Postgraduate School (nps.edu)

Naval Postgraduate School Catalog:

https://nps.edu/documents/104111578/117929726/NPS+Academic+Catalog+APR+2023.pdf/6de7ff7f-2d8a-cd92-3854-df3a57460c3d?t=1682438424350

D.3.2 : Description and evidence that program information is regularly assessed to ensure their accuracy, consistency, and relevance.

- **Evidence is required. Evidence could include a timeline or cycle for publication reviews or an older publication with evidence of the updated version.**

Information on our programs is reviewed regularly by assigned Academic Associates, quarterly by each department Academic Chair. Changes are submitted to the DDM Department Area Chairs for review, then submitted to the NPS Academic Council (AC) for review and approval, and then finally sent to Registrar to update all the information in the NPS Academic Catalog.

Link to archives of NPS catalogs: https://nps.edu/web/registrar/past-edition-archives

A screenshot is included as appendix 15 in section D.3: Archives of NPS Catalogs

D.4 Faculty and Staff

The program shall demonstrate adequate program leadership, faculty, and staff. Program leadership and faculty are academically/professionally qualified for their roles. Program leadership and faculty are resourced for administration and effective teaching as appropriate to their respective roles. The faculty contribute to their institution, professional community, and society.

The program supports the faculty to participate in the creation of new knowledge related to the management of projects through research, professional development, and/or other scholarly activity.

To demonstrate that the above standard is met, the program shall submit the following information:

D.4.1: Description of the program leadership's and support staff's roles and responsibilities to demonstrate an adequate staffing structure.

- **Evidence is optional. Evidence could include an organizational chart demonstrating the relationship of the program leader to the institution and demonstrating the staff support provided to the program.**

[6]Our academic structure supports our mission (appendix 16 section D.4 shows our department organizational chart). Alongside the Chair of the department, who is responsible for the overall department leadership, the Associate Chair for Research, Associate Chair for Instruction, and the Associate Chair for Acquisition Sciences, we also have a Program Officer who is an active-duty officer (typically at the Commander rank) with administrative responsibilities for DDM's curricula, overseeing student administration and coordinating the school's biennial curriculum review process. We have Area Chairs (officially Assistant Chairs) for each of the six disciplinary faculty groups: Defense Financial Management, Defense Program Management; Contract Management; Defense Logistics Management, Defense Manpower System Analysis, and Defense Strategic Leadership and Management. Area Chairs are responsible for the faculty and courses in their respective areas. They serve as raters for the faculty in the DoD's performance appraisal system, and they coordinate individual faculty work plans and teaching schedules. Additionally, each curriculum has an assigned Academic Associate (AA), who manages curricular matters, including students in the curriculum. The AAs coordinate modifications to the degree concentrations, through the biennial curriculum review process. The AAs help ensure Navy requirements are linked to DDM's academic competencies.

The Associate Chair for Acquisition Sciences is also the Assistant Chair for Program Management, and the AA for the MSPM 836 degree, MS in Defense Program Management (816) degree and the Advance Acquisition Studies resident (217) and DL (218) certificates. He is a non-tenure track Professor of Practice faculty responsible also for academic teaching, research, and service responsibilities. The area has five full-time non-tenured-track faculty, of which all are retired military officers with significant Defense program management experience.

DDM administrative staff includes a faculty associate for accreditation and assessment who manages the assessment and accreditation programs; a faculty associate for education who managed the distance learning programs; and a faculty associate for research who manages the Acquisition Research Program (ARP). The ARP founded in 2003 is running strong. The program receives financial sponsorship from several senior acquisition-related offices and departments across the DoD. The ARP defines acquisition research broadly and supports research in all DDM disciplines.

The administrative staff is responsible for day-to-day financial management, travel, and other administrative duties and directly support all our programs. They are civilians hired as GS (General Service) employees, which is the typical hiring structure for most government employees. The faculty associates are appointed under Schedule A of the Excepted

[6]As a Navy-run university, NPS is subject to Federal and Navy rules, regulations, and processes governing aspects of administration, including financial management, procurement, human resources management (including hiring, pay), timekeeping, and travel. As NPS faculty members are Federal employees appointed under Schedule A of the Excepted Service, they are obligated to operate within these processes, which yields a climate of compliance not found in other universities.

Service. We actively support their development and have seen several of our employees receive promotions outside DDM and within NPS.

D.4.2: Description and evidence of the faculty workload.

- **Evidence is required. Evidence could include the workload policy or agreement that evidences sufficient time for teaching, research and scholarly activity, practice, professional development, and service, as appropriate to the mission of the institution.**

The standard faculty workload model for our full-time, tenure-track faculty (in the ranks of Assistant Professor, Associate Professor, and Professor) typically includes teaching four courses per academic year, a quarter for professional development (research, writing, and scholarly activities), and a quarter in which they bring in reimbursable research funding. The full-time, non-tenure-track, instructional faculty (in the ranks of Lecturer, Senior Lecturer, and Professor of Practice) typically teach eight courses per academic year. All full-time faculty are expected to participate in NPS Service activities like capstone project/thesis advising, Department and NPS-wide committees like the Faculty Council or Academic Council, graduations, etc. Additionally, full-time faculty maintain connections to professional organizations and society to remain relevant in their respective disciplines. Faculty publication of peer-reviewed journal articles, technical reports, and articles in professional magazines demonstrates the faculty are top thought leaders in their disciplines. A full time NTT faculty instructor usually teaches two courses per quarter (courses typically meet three to four hours per week over eleven weeks, plus a one-week finals period). DDM uses course segments as the workload metric, but we expect all faculty members to bear a fair share of student project or thesis advising load and to provide appropriate NPS service contributions.

NPS expects tenure track faculty members to secure funding for one quarter, either from external sponsors or from internal NPS research programs. Tenure-track faculty without fourth-quarter funding may request additional teaching. Non-tenure track faculty members typically teach for three or four quarters per year (eight total course sections). They do not receive the NPS-funded quarter professional development quarter and are encouraged to seek external or internal research/consulting funding. Faculty members serving in administrative positions (Chair, Associate Chair, Assistant Chair or Academic Associate) may have reduced teaching loads. See appendix 17 section D.4 for the MSPM (836) DL and the MS in Defense Program Management (816) degrees Full-time Faculty Workloads.

D.4.3: Description and evidence of the institutional/program standards for hiring and retaining faculty.

- **Evidence is required. Evidence should include documentation of academic and professional standards for hiring faculty and retaining faculty, policy documents on hiring and retaining faculty, or related documents.**

Faculty overview: DDM has 45 full-time faculty members, both tenure-track (20) and non-tenure track (25), allocated to six academic areas. Our tenure-track faculty have terminal degrees from respected schools, while our non-tenure track faculty have extensive military service experience and graduate degrees, including in some cases terminal degrees.

Faculty Recruiting: Recruiting processes are governed by formal DDM policies for all faculty appointments (tenure track, non-tenure track, and intermittent). (See appendices 18-19-20 respectively in section D.4 for these policies.)[7] In all cases, the Area Chairs (AC) for the academic discipline involved coordinates faculty recruiting. The AC appoints a recruiting committee from the area faculty. The committee advertises the position according to the norms for the discipline involved and, consistent with federal human resources requirements, collects resumes and conducts preliminary (phone) interviews. The committee presents their results and recommendations to all area faculty members who vote on the candidates to invite for a campus visit. The DDM Chair approves the candidate slate. Campus visits include interviews with a cross-section of the DDM faculty, the DDM Chair, and the Associate Chairs. All faculty members are invited to the candidate's research presentation, and all participating faculty members vote whether to approve a candidate. The DDM Chair approves extending an offer to a candidate, based on the faculty feedback and

[7] All DDM policies are currently under review and will be updated by the end of the academic year, September 30, 2024.

the AC's recommendation. The DDM Chair recommendation is sent to Provost and President, who is the official hiring authority.

Faculty Promotion and Tenure:

DDM has a robust mentoring and review process for all tenure track faculty members from the time they are hired until the start of the tenure review process (a six-year clock in total). All tenure track faculty members have a mentor, of their choice, to support them through this process and ensure their teaching and service assignments are appropriate for a nontenured faculty member. The mentor also guides the candidate through a series of collegial reviews by the tenured faculty, including an 18-month "get to know you" review, a formal third-year review, annual reviews thereafter as needed, and the pre-tenure review prior to advancing to candidacy. Candidates successfully completing these reviews proceed to the tenure process. Tenured Associate Professors are mentored by a Professor within DDM. They are reviewed by the school's tenured Professors every three to four years and advised on their progress toward promotion to Professor. Appendices 21 and 22, section D.4 show respectively promotion for TT and reviews for Lecturers and Senior Lecturers. A formal process to determine academic and/or professional qualification criteria has been in place and it is described in appendix 23 in section D.4.

Faculty members with extensive military experience are an integral part of the programs in DDM. DDM and NPS consciously employ these experienced military professionals, including both active duty and retired military officers, on a full-time basis to enhance the relevancy of the academic programs. All such faculty have master's degrees, and in some cases terminal degrees, in their respective areas and have been recognized as accomplished professionals in their fields. Our military faculty members generally are assigned to NPS for three years. Currently, 3 military officers are on the faculty. Military assignments while in DDM can include teaching courses, advising student projects or theses, and working with civilian faculty on various projects. We evaluate their teaching performance just as we do our civilian faculty. Former senior military personnel also play an important role in the delivery of our programs. Currently, 12 of the non-tenure track faculty members among the participating faculty are retired military. Our active and retired military faculty participate in numerous phases of our programs, including program development, teaching, defense-focused research, student advising, and assessment.

D.4.4: Curriculum vitae for program leadership demonstrating academic and/or professional qualifications in the management of projects, as appropriate to the program mission and objectives.

- **Evidence is required. Evidence should include the curriculum vitae or resumes for program leadership.**

For each academic degree or award, complete the following grid and add rows, as necessary.

(See grids in appendix 24, section D.4 for the MSPM (836) and the MSDPM (816) Degrees.)

(See appendix 25, section D.4 for the CVs of leadership in the MSPM (836) and the MSDPM (816) Degrees.)

D.4.5: Curriculum vitae for all current faculty, demonstrating sufficient academic and/or professional qualifications in the management of projects, as appropriate to the program mission, expected levels of academic achievement, and assigned teaching responsibilities.

- **Evidence is required. Evidence should include the curriculum vitae for all faculty teaching the courses in the management of projects program as aligned to the three GAC core areas of focus.**

See tables 6 and 7 below. Also refer to appendix 26 in section D.4 for the curriculum vitae of all the current faculty members teaching in the MSPM (836) and the MSDPM (816) Degrees.

Table 6. DDM Full-time Faculty Teaching in the MSPM (836) DL Degree

Full-time Faculty (Rank)	Program
Dunlap, Jeff (Lecturer)	Program Management and Defense Program Mgmt.
Hirschmann, Keith (Professor of Practice)	Program Management and Defense Program Mgmt.
Giles, Kathleen CDR (Assistant Professor)	Program Management and Systems Engineering Program
Jones, Raymond (Professor of Practice)	Program Management, Defense Program Mgmt., and DDM Chair
Pace, Howard (Professor of Practice)	Program Management and Defense Program Mgmt.
Mortlock, Robert (Professor of Practice)	Assist. Chair of Program Management and Defense Program Mgmt. and Associate Chair for Acquisition Sciences
Poree, Kelley (Lecturer)	Program Management, Contract Management (DL and resident), Defense Program Management.
Schwartz, Brett (Lecturer)	Program Management, Contract Management (DL and resident), Defense Program Management.
Tick, Simona (Senior Lecturer)	Program Management, Manpower Management—Associate Chair of Instruction
Gibbons, Deborah (Associate Professor)	Strategic Leadership & Management, Program Management
Candreva, Phil (Senior Lecturer)	Defense Financial Management, Program Management
Muehlbach, Donald (Professor of Practice)	Systems Engineering, Program Management

Menichini Amilcar (Associate Professor)	Defense Financial Management
Aten Kathryn (Associate Professor)	Strategic Leadership & Management, Program Management
Friedman Mitchell (Senior Lecturer)	Strategic Leadership & Management, Program Managements

Table 7. DDM Ful-time Teaching in MS in Defense Program Management (816) Resident Degree

Full-time Faculty (Rank)	Program
Dunlap, Jeff (Lecturer)	Program Management and Defense Program Mgmt.
Hirschmann, Keith (Professor of Practice)	Program Management and Defense Program Mgmt.
Giles, Kathleen CDR (Assistant Professor)	Program Management and Systems Engineering Program
Jones, Raymond (Professor of Practice)	Program Management, Defense Program Mgmt., and DDM Chair
Pace Howard (Professor of Practice)	Program Management and Defense Program Mgmt.
Mortlock, Robert (Professor of Practice)	Assist. Chair of Program Management and Defense Program Mgmt. and Associate Chair for Acquisition Sciences
Poree, Kelley (Lecturer)	Program Management, Contract Management (DL and resident), Defense Program Management.
Schwartz, Brett (Lecturer)	Program Management, Contract Management (DL and resident), Defense Program Management.
Tick, Simona (Senior Lecturer)	Program Management, Manpower Management—Associate Chair of Instruction
Seagren, Chad (Senior Lecturer)	Defense Program Management, Manpower Management
Ahn, Tom (Assistant Professor)	Defense Program Management, Manpower Management
Cunha, Jesse (Associate Professor)	Defense Program Management, Manpower Management
Powley, Ned (Associate Professor)	Strategic Leadership & Management, Program Management
Shilling Michael (Lecturer)	Contract Management
Helzer Erik (Associate Professor)	Strategic Leadership & Management, Program Management

Dew Nicholas (Professor)	Strategic Leadership & Management, Program Management
Sullivan Ryan (Associate Professor)	Defense Financial Management
Yoder Cory (Senior Lecturer)	Contract Management
Augier Mie-Sophia (Professor)	Strategic Leadership & Management, Program Management

D.4.6 : The courses/modules offered by year and term/semester over the past two years, including course title and assigned faculty.

The program will complete the faculty chart for D.4.6 documenting the courses taught and the assigned faculty over the past two years.

Table 8. MSPM (836) DL Courses Taught AY2022 and AY2023 (Courses are all mandatory)

Course/Module Title	Name of Degree Program	Term/Semester Offered	Year(s) Offered	Assigned Faculty (First Name/Last Name)
MN3301: Acquisition of Defense Systems	MS Program Management (836)	Summer	2022/23	Giles Kathleen Pace Howard Dunlap Jeff Hirschman Keith
MN3302: Advanced Project Management	MS Program Management (836)	Fall	2022/23	Hirschman Keith
MN3303: Principles of Acquisition and Contract Management	MS Program Management (836)	Summer	2022/23	Schwartz Brett Poree Kelley
MN3070: Fundamentals of Cost Benefit Analysis	MS Program Management (836)	Fall	2023	Tick Simona
MN4474: Organizational Analysis	MS Program Management (836)	Fall	2022/23	Gibbons Deborah
MN4602: Acquisition Test and Evaluation Decision Science	MS Program Management (836)	Summer	2022/23	Mortlock Robert
MN3384: Acquisition Production, Quality and Manufacturing Decision Science	MS Program Management (836)	Fall	2022/23	Mortlock Robert
MN3172: Resourcing National Security: Policy and Process	MS Program Management (836)	Spring	2022/23	Brien Spencer Candreva Phil Kaczorowski David
MN3309: Software Acquisition Management for Defense Systems	MS Program Management (836)	Winter	2022/23	Dunlap Jeff
MN4105: Strategic Management	MS Program Management (836)	Winter	2022/23	Dowing James Norcross Melissa
MN4045: Defense-Focused Managerial Inquiry	MS Program Management (836)	Fall	2022/23	Powley Ned Friedman Mitchell
MN4470: Strategic Planning and Policy for the Acquisition Logistics Manager	MS Program Management (836)	Fall	2022/23	Jones Ray
MN4307: Defense Acquisition Program Management Case Studies	MS Program Management (836)	Spring	2022/23	Mortlock Robert
SE4011: Systems Engineering for Acquisition Managers	MS Program Management (836)	Winter	2023	Muehlbach Donald
MN4090: Capstone Applied Project	MS Program Management (836)	Winter, Spring	2022/23	Rendon Rene Mortlock Robert

Table 9. MS in Defense Program Management (816) Courses Taught AY2022 and AY2023 (Courses are all mandatory)

Course/Module Title	Name of Degree Program	Term/Semester Offered	Year(s) Offered	Assigned Faculty (First Name/Last Name)
MN3331: Principles of Acquisition & Program Management	MS in Defense Program Mgmt. (816)	Fall, Winter, Spring, Summer	2022/23	Dunlap Jeff Jones Ray Hirschman Keith
MN3010: Managing for Organizational Effectiveness	MS in Defense Program Mgmt. (816)	Winter, Summer	2022/23	Harker Susan Helzer Erik Friedman Mitchell
MN3303: Principles of Acquisition and Contract Management	MS in Defense Program Mgmt. (816)	Fall, Winter, Summer	2022/23	Schwartz, Brett Shilling, Michael Poree Kelley
MN3070: Fundamentals of Cost Benefit Analysis	MS in Defense Program Mgmt. (816)	Winter, Summer	2022/23	Tick Simona Seagren Chad
MN3302: Advanced Project Management	MS in Defense Program Mgmt. (816)	Summer	2023	Hirschman Keith
MN3315: Acquisition Management and Contract Administration	MS in Defense Program Mgmt. (816)	Fall, Spring	2022/23	Poree Kelley Shilling Michael
MN3384: Acquisition Production, Quality and Manufacturing Decision Science	MS in Defense Program Mgmt. (816)	Fall, Spring	2022/23	Mortlock Robert
MN3309: Software Acquisition Management for Defense Systems	MS in Defense Program Mgmt. (816)	Winter, Summer	2022/23	Dunlap Jeff
MN3320: Contract Cost and Price Analysis	MS in Defense Program Mgmt. (816)	Winter, Summer	2022/23	Yoder Cory
MN3321: Federal Contract Negotiations	MS in Defense Program Mgmt. (816)	Winter, Summer	2022/23	Yoder Cory
MN4053: Defense Budget and Financial Management Policy	MS in Defense Program Mgmt. (816)	Winter, Summer	2022/23	Candreva Phil Cunha Jesse Sullivan Ryan
MN4014: Strategic Management	MS in Defense Program Mgmt. (816)	Fall, Spring	2022/23	Aten Kathryn Augier Mie Downing James
MN4045: Defense-Focused Managerial Inquiry	MS in Defense Program Mgmt. (816)	Spring, Fall	2023	Powley Ned
MN4470: Strategic Planning and Policy for the Acquisition Logistics Manager	MS in Defense Program Mgmt. (816)	Fall, Spring	2022/23	Jones Ray
MN4602: Acquisition Test and Evaluation Decision Science	MS in Defense Program Mgmt. (816)	Summer, Winter	2022/23	Mortlock Robert
MN4307: Defense Acquisition Program Management Case Studies	MS in Defense Program Mgmt. (816)	Fall, Spring	2022/23	Mortlock Robert
MN4090: Capstone Applied Project	MS in Defense Program Mgmt. (816)	Summer, Fall, Winter, Spring	2023	Mortlock Robert

D.4.7 : The professional development and institutional engagement of faculty addressing the following:

D.4.7.1 : Description and evidence of policies or processes to support faculty in acquiring new skills and knowledge.

- **Evidence is required. Evidence should include professional development policies or processes for faculty.**

NPS encourages faculty to develop new skills and knowledge through the faculty model by allowing faculty to "buy-out" of teaching course by conducting reimbursable funded research or by working on projects of critical importance the Naval of DoD operational forces. A screenshot of our Faculty Affairs website for a list of resources and policies related to faculty development is provided in appendix 27, section D 4.

D.4.7.2 Description and evidence of faculty engagement in activities to acquire new skills and knowledge.

- **Evidence is required. Evidence could include faculty participation in professional development activities, training, and/or meetings as appropriate to the modality and mission of the program.**

Examples of faculty acquiring new skills and knowledge in the following:

NPS funded Dr. Mortlock to attend and graduate from the AACSB Post-Doctoral Bridge Program – University of Florida, Management Concentration for scholarly academic status supporting accreditation. Dr. Mortlock earned both Program Management Professional (PgMP) and Project Management Professional (PMP) credentials for Project Management Institute (PMI). Additionally, NPS has encouraged the immersive presentations and workshops where faculty engage with program management professionals like the following: Mortlock, R. F. (Author & Presenter), Acquisition Workshop, "Shipbuilding Acquisition Case Study: U.S. Coast Guard Offshore Patrol Cutter," Acquisition Research Program. (March 15, 2023)

D.4.7.3 : Description of the interaction between the program and other programs at the institution, as appropriate to the program mission.

Both MSPM (836) and MSDPM (816) degrees incorporate courses that cover the DoD Defense Acquisition Workforce Improvement Act (DAWIA) functional areas of program management, contract management, financial management/cost estimating, test & evaluation, lifecycle logistics, and as well as engineering & technical management. These courses are taught by nationally recognized faculty from areas outside the Acquisition/Program Management area.

D.4.7.4 : Description of program leadership and faculty's contribution to the governance and intellectual life of the program and institution.

Members of the Acquisition Sciences/Program Management faculty not only teach courses, advisor student research, and conduct research, but also serve in key leadership positions and academic positions. Professor Ray Jones serves as the DDM Chair. Professor Bob Mortlock serves as DDM Associate Chair for Acquisition Sciences, as well as the Academic Associate (AA) for the 836- and 816-degree programs. Additionally, course coordinator (CC) positions are spread to the faculty with Ray Jones assigned as CC for MN4470, Bob Mortlock assigned as the CC for MN3384, MN4307, and MN4602, Jeff Dunlap assigned as the CC for MN3301, MN3331, and MN3309, and Keith Hirschman assigned as CC for MN3302.

D.4.8 : The external engagement of faculty addressing the following:

D.4.8.1: Description of contribution to the professional community.

NPS encourages presentations and workshops where faculty engage with professional communities of stakeholders.

Professor Ray Jones, in addition to being the Department Chair, has been a consulting member of the Army Science Board for the last two years. In this capacity, he provides advice to the board on acquisition and matters pertaining to the contested logistics environment including world-wide supply chain issues. Additionally, Professor Jones works with Department of Defense Combatant Command Technology offices to facilitate the transition of technology solutions to the customer (warfighter). This requires engagement across many organizations including Naval Operational Staffs. As part of the NPS innovation strategy, Professor Jones works with and advises various

venture capital groups, such as the Innovation Accelerator Foundation, that are affiliated with the DoD, regarding innovative financial and organizational strategies that can help the DoD advance technology and provide opportunity for small businesses to work more effectively with the DoD. Within the DoD, Professor Jones interfaces with and works closely with key innovation organizations, such as the Defense Innovation Unit, to develop programmatic and business strategies that will facilitate technology transfer to the operational forces.

Professor Pace is an innovation coach and program management mentor throughout the Navy and the U.S. Combatant Commands. His consulting work teaches our sailors, marines, soldiers, and airmen how to improve warfighting capabilities through innovation. This is a multi-disciplined management approach, where sourcing, curation, ideation, prototyping, experimenting, and transition becomes the process used to find better ways of doing business or closing capability gaps while leveraging the DOD's adaptive acquisition framework and commercial best practices to field these solutions. At the request of the DOD Chief of Digital and Artificial Intelligence Office (OSD CDAO), Professor Pace serves as a distinguished guest lecturer and consultant to DOD flag officers, general officers and members of the senior executive service attending conferences to discuss and debate the proper strategies associated with the use, management, and deployment of artificial intelligence throughout the department of defense.

Professor Pace also serves as the CDAO spokesperson for the new TRADEWIND solution marketplace. The marketplace allows DOD commands to acquire artificial intelligence and machine learning technologies and services through Commercial Solutions Openings (CSOs) approach which dramatically reduces the time required to procurement these technologies. In partnership with industry and academia, Professor Pace participated as a program management consultant and acquisition subject matter expert for NPS Cooperative Research and Development Agreements (CRADAs). Professor Pace mentors' industry teammates on product maturation, prototyping, experimenting, and transitioning to the DOD Warfighter. Professor Pace serves as the department's representative to the NPS Space Systems Academic Council and the Cyber Academic Council.

Professor Hirschman deployed on July 2023 with the USS Eisenhower and Carrier Strike Group 2 as a faculty advisor for the group's combine capstone exercise to assess the use of the Root Cause Analysis Tool (RCAT) as an assessment instrument in a continuous learning environment. Provided feedback to exercises evaluators on potential complementary research that NPS students and faculty could conduct in future support of the maturation of the assessment tool.

He coordinated outreach and engagement with Defense Industry executives in the US and Australia in support of NPS research sponsored by the Joint Chiefs of Staff, J-7 Directorate for Joint Force Development for Industry perspective on plans for the use of the Economic instrument of national power for deterrence in the Pacific. He actively engaged with Program Management Offices (PM FLRAA, PM TUAS, PM UAS, PEO Solider (former), PM Soldier Lethality) throughout the DoD to assemble and enhance user case studies to augment student learning in the context of project management within the DoD.

He has actively engaged with Program Management Offices (PM FLRAA, PM TUAS, PM UAS, PEO Solider (former), PM Soldier Lethality) throughout the DoD to assemble and enhance user case studies to augment student learning in the context of project management within the DoD.

He also coordinated with the Israeli Defense Forces to establish a future academic program tailored specifically to Israeli Air Force Officers/Project Managers aimed at incorporating PMI standards in their curriculum. Lastly, he is a member of the DDM's Integrated Product Team (IPT) serving on the department's accreditation and assessment procedures and frameworks for the renewal of the Association to Advance Collegiate Schools of Business (AACSB) accreditation.

Other examples include the following:

- Mortlock, R. F. (Author & Presenter), Immersive Workshop, "Camouflage Conflict: An Exercise in Strategic Problem Solving," National Contract Management Association. (March 8-9, 2023).
- Mortlock, R. F. (Author & Presenter), Immersive Workshop, "Camouflage Conflict: An Exercise in Strategic Problem Solving," Government Contract Management Symposium, Washington D.C. (December 5, 2022).
- Mortlock, R. F. (Author & Presenter), Acquisition Workforce Professional Development Session, " Enhanced Combat Helmet Case Study," Naval Surface Warfare Center – Philadelphia Division (NSWCPD). (March 24, 2022).
- Mortlock, R. F. (Author & Presenter), Rapid Acquisition Workshop," Enhanced Combat Helmet Case Study," Naval Warfare Studies Institute and Acquisition Research Program. (February 2, 2022).
- Mortlock, R. F. (Author & Presenter), Acquisition Workforce Professional Development Session, "Defense Acquisition Case Studies," JPEO A&A, Picatinny NJ. (March 2, 2021).
- Mortlock, R. F. (Author & Presenter), Acquisition Workforce Professional Development Session, "Defense Acquisition Case Studies," PEO IEW&S, MD. (February 23, 2021).
- Mortlock, R. F. (Author & Presenter), Acquisition Workforce Professional Development, "Defense Acquisition Case Studies," PEO STRI, FL. (March 10, 2020).
- Mortlock, R. F. (Author & Presenter), Acquisition Workforce Professional Development Session, "Defense Acquisition Case Studies," PEO GCS, MI. (February 25, 2020).
- Mortlock, R. F. (Author & Presenter), Acquisition Workforce Professional Development Session, "Defense Acquisition Case Studies," PEO STRI, FL. (March 7, 2019).
- Mortlock, R. F. (Author & Presenter), Acquisition Workforce Professional Development, "Defense Acquisition Case Studies," PEO EIS, VA. (February 27, 2019).
- Mortlock, R. F. (Author & Presenter), Acquisition Workforce Professional Development, "Defense Acquisition Case Studies," PEO GCS, MI. (February 5, 2019).

D.4.8.2: Brief description of contributions to society through scholarship, leadership, and other activities.

Faculty are encouraged to maintain professional associations. For example, Professor Mortlock maintains PMP and PgMP certifications as an active member of the local PMI Monterey chapter. Professor Mortlock is also a member of the editorial board for Defense Acquisition Journal. Additionally, faculty are expected to write and publish peer-reviewed journal articles, technical reports, conference paper and professional magazine articles/editorials. Examples for Professor Mortlock's and Jones' CVs include:

Peer Reviewed Journal publications:

- Mortlock, R.F., Bukowski, K.D., & Parkin W.S. (Fall, 2022). Information technology acquisitions: consumption-based contracting. *Journal of Contract Management*, 17, 6-24. https://ncmahq.org/Web/Web/Resources/Journal-of-Contract-Management.aspx
- Hauser, M., Ferrer, G., & Mortlock, R. (2022). Assessing policy changes on the cost of husbanding services for Navy ships. *Defense Acquisition Research Journal*, 29(4), 360–386. https://www.dau.edu/darj/p/ARJ-102-Hauser
- Karnes, J. L. & Mortlock, R. F. (2021). Aligning program management competencies to industry standards. *Defense Acquisition Research Journal*, 28(4), 366–419. https://www.dau.edu/sites/default/files/Migrate/ARJFiles/ARJ98/ARJ98_Mortlock.pdf

- Jones R., Housel T., Munn J., (2020). *Acquiring Artificial Intelligence Systems: Development Challenges, Implementation Risks, and Cost/Benefits Opportunities,* Naval Engineers Journal No 132-2, June 2020.

Technical Research Papers:

- Symposium research paper and presentation entitled "Cost Estimating and Affordability Case Study: Air-to-Ground Missile Program" at the 20th Annual Acquisition Research Symposium, 10-11 May 2023 as part of Panel 5: Enhancing Decision Making.

- Tick, S.L., Nissen, M.E., Rendon, R.G., & Mortlock R.F. (31 Dec 2022). Preparing engineering duty officers for major command assignments. NPS-IS-22-011. Naval Research Program, NRP Project ID: NPS-22-N277-A.

- Symposium research paper and presentation with Ray Jones entitled "Program Management Versus Portfolio Management in Defense Acquisition," 11 May 2022 as part of Panel 5: Supporting the Current & Future Workforce.

- Jones R., Housel T., *Extending an Econophysics Value Model for Early Developmental Program Performance Prediction and Assessment*, Monterey ARP Symposium and Proceedings, 2018

- Jones R., (2017). "*Why Do Programs Fail? An Analysis of Defense Program Manager Decision Making in Complex and Chaotic Program Environments",* Monterey CA, NPS-AM-18-020

Professional Articles:

- Mortlock, Robert F., Col. USA (Ret.), Ph.D., (2023, November – December 2023). The adaptive acquisition framework – continuous process improvement, *Defense Acquisition*, 20-23.

- Mortlock, R.F., Jones R.D., (2023, July-August). Closing the innovation gap by rethinking defense acquisition, *Defense Acquisition*, 30-35.

- Mortlock, R.F. (2022, October). The human side of acquisition, *Contract Management*, 48-53.

- Mortlock, R.F. (2022, Spring). Been there, done that: behavioral acquisition, *Army AT&L Magazine*, 88-95.

- Mortlock, R.F. (2021, Fall). Been there, done that: behavioral acquisition, *Army AT&L Magazine*, 140-145.

- Mortlock, R.F. (2021, Winter). Been there, done that: who is the customer? *Army AT&L*, 135-140.

- Jones R., (2017). *The Scientific Evolution of Economics*, Western Economics Association International Conference, June 2017.

- Jones R., (2016). *"Understanding Complexity and Self-Organization in a Defense Program Management Organization",* Monterey CA, NPS-PM-16-018.

- Jones R., *"Improving Program Performance Through Relationships"*, Army AL&T Magazine, July-Sep 16 Edition, p.135.

D.4.9 : Description and evidence of how the effectiveness of faculty is evaluated and used to inform continuous improvement.

- **Evidence is required. Evidence could include the measures used to evaluate faculty effectiveness, such as course**

evaluations, the results of the evaluation, who analyzes the data, and how they are used for program management.

NPS faculty have annual appraisals using the DOD Performance Management and Appraisal System (DPMAP) (link at: https://nps.edu/web/hro/dpmap). Each faculty member has an assigned supervisor. For example, Bob Mortlock supervises the Program Management faculty and staff. Yearly, the supervisor and employee agree on a Performance Plan that covers teaching, research, and service objectives in accordance with the employees official Position Description. A mid-year assessment is documented for adjustments to plan and provide feedback and progress toward the objectives. At the end of the yearly period, each employee receives an official performance appraisal and rating documented their teaching, research, and services accomplishments.

Instructors for every course receive course evaluation forms (CEFs) from students (see appendix 28, section D.4). The students feedback is reviewed by the instructors, course coordinators, degree program academic associates and Area Chairs to continually improve the course and degree program.

D.5 Student Support

The program shall demonstrate that it facilitates student academic and professional success.

Students admitted to the academic degree or award should meet the institution's admission and selection policies. The program, regardless of modality, shall demonstrate equal student access to services in support of academic achievement.

To demonstrate that the above standard is met, the program shall submit the following information:

D.5.1: Description and evidence of clear policies for program admission, as relevant to the expected level of academic achievement.

- **Evidence is required. Evidence should include published policy for admission to the program.**

Link to our programs' admission webpage: https://nps.edu/web/admissions/home

While our students are selected for us, they must meet our admissions requirements. Admissions standards and processes reflect two dimensions: Academic and Professional. DDM and NPS set academic standards for admissions. The Navy, and other sponsoring agencies, select students—who have met the academic standards—for admission based on professional and career considerations. Thus, admission to DDM/NPS is accomplished through the joint efforts of the school and students' sponsors.

The military services determine the number of students selected for our resident curricula each year. In the Navy, a board convenes to establish a quota for students who will be sent for fully funded education at the Naval Postgraduate School. Navy quotas are based on a complex system designed to balance the Navy's billets (job positions) requiring advanced education in the various subspecialties with the number of officers, at the appropriate rank, possessing that subspecialty education. This determines the number of officers that will be selected to attend DDM programs. The Navy then identifies officers interested in a DDM degree who meet our admission requirements. This student selection and admission process clearly reflects our mission and our close relationship with our program sponsors. During the earlier years of their career, all Navy officers are screened for graduate study, based on their undergraduate academic performance (officer transcripts may be reviewed by the NPS Admissions Office). In addition to the academic admissions standards, U.S. Navy officers are reviewed for selection to graduate school based on their professional performance and promotion potential.

Selection boards and Senior Officer Reviews occur annually to select eligible officers. The selection board evaluates both the officer's professional performance in the Navy and their prior academic record. Officers selected for graduate study are then offered the opportunity to attend a specific graduate curriculum. No one is ordered to graduate school against his or her will. Similar selection procedures are employed by the other U.S. services and by federal agencies wishing to nominate civilian employees for graduate study.

Almost all our students have practical operational military experience. Most are professional, mature, respectful, task-oriented, and trained in leadership and teamwork. They appreciate that learning and successful degree completion will advance their careers. Most know the types of jobs they will fill upon graduation and so are motivated to direct their studies to success in those assignments. Students demand relevance and currency in their classes, which sets a high bar for the faculty to maintain an appropriate focus on both mission and discipline.

NPS-DDM Admission

DDM and NPS set academic admissions standards. All students enrolled at NPS are assigned an Academic Profile Code (APC) by the NPS registrar's office. This three-digit code summarizes a student's prior college performance. Each curriculum has a minimum APC requirement. The APC standard for all of our curricula requires a minimum of a baccalaureate degree with a 2.20 grade point average; one calculus course for business/social sciences with a C or better, one lower-level calculus course with at least a C-, or two pre-calculus courses with a B+ or better; and no science course requirement. The sponsoring agencies and military career managers then select students meeting the academic standards, based on professional and career considerations. Candidates selected for graduate study are offered the opportunity to attend a specific graduate curriculum but can choose to decline.

International Graduate Students
In the case of students from allied nations, the appropriate Academic Associate reviews all individual transcripts and recommends acceptance or rejection; this recommendation is normally the determining factor in the admission decision. International candidates from non-English speaking countries are also required to validate their fluency in English through the Test of English as a Foreign Language (TOEFL). The minimum TOEFL score required is 83 IBT (Internet Based Test) and 560 Written Test.

MSPM (836) Program

Admission Requirements

The MSPM (836) degree is a 24-month, part-time distance learning program open to qualified DoD uniformed personnel, federal employees, international students, and a limited number of DoD contractor personnel. Students that complete the degree program for Program Management earn numerous DAU fulfillments in other functional areas.

Candidates for the program must have achieved the following: a baccalaureate degree with a minimum undergraduate quality point rating (QPR) of 2.20, completion of at least one semester of college algebra or trigonometry is the minimum mathematical preparation, and an Academic Profile Code (APC) of 355. Applicants without previous program management experience are eligible for admission. In addition to institutional funding support, students must also provide a participation agreement acknowledging support from their command or home organization.

Academic Requirements

The Master of Science in Program Management (836) degree requires completion of a minimum of 48 credit hours of graduate-level courses, at least 12 which are at the 4000 level, and completion of an acceptable Capstone Applied Project, with at least one advisor from the Department of Defense Management.

MS in Defense Program Management (816)

Admission Requirements

The program is an interdisciplinary program within the Acquisition Sciences area designed to integrate business

principles, program leadership and management theory, operations analysis, and systems engineering applications. It is uniquely tailored to federal government acquisition management and intensive exposure to the fundamental principles of the acquisition environment.

It can be delivered in 12 to 18-months, by adding Joint Professional Military Education courses or elective academic certificates as required. Candidates for the program must have achieved the following: a baccalaureate degree with above-average grades is required. Completion of at least two semesters of college algebra or trigonometry is the minimum mathematical preparation. An APC of 355 is required for entry. International students should refer to the Admissions section for current TOEFL and entrance requirements.

Academic Requirements

The Master of Science in Defense Program Management (816) degree requires completion of a minimum of 48 credit hours of graduate-level courses, at least 12 hours of which are at the 4000 level. Completion of an approved sequence of courses in the student's area of concentration with a minimum of 20 credit hours. Completion of an acceptable capstone project.

D.5.2: Description and evidence of clear policies for academic performance and progress, as relevant to the expected level of academic achievement.

- **Evidence is required. Evidence should include policies for student academic performance and progress.**

Please refer to appendix 29 and 30, Section D.5. for information on Students Academic Support and Counseling, and the NPS Student Handbook.

D.5.3: Description and evidence of the academic advisement provided to students necessary to complete the program.

- **Evidence is required. Evidence could include documents to provide academic advisement to students or a link to a webpage and a screenshot of academic advisement resources.**

The Master of Science degrees require the completion of a student capstone project with advisors. Generally, students are encouraged to select an appropriate research project topic and ask DDM full time faculty to advise on their project. Faculty work with students to refine the research problem statement, objectives, research methodology, literature review and possible data sources. The Acquisition Research Program (ARP) also provides potential capstone research topics. After approval of the capstone research plan by the advisors and an IRB review, students set up a thesis dashboard in Python that tracks completion milestones from the Thesis Proposal Form (TPF) to the Thesis Release and Acceptance Form (TRAF). The advisor load is spread amongst the DDM full time faculty. Figure 11 shows a screenshot of the Thesis Advising Report by Professor Mortlock and figure 12 shows a screenshot of the students that completed their capstone applied project and graduated in December 2023.

Figure 11. Thesis Advisory Report

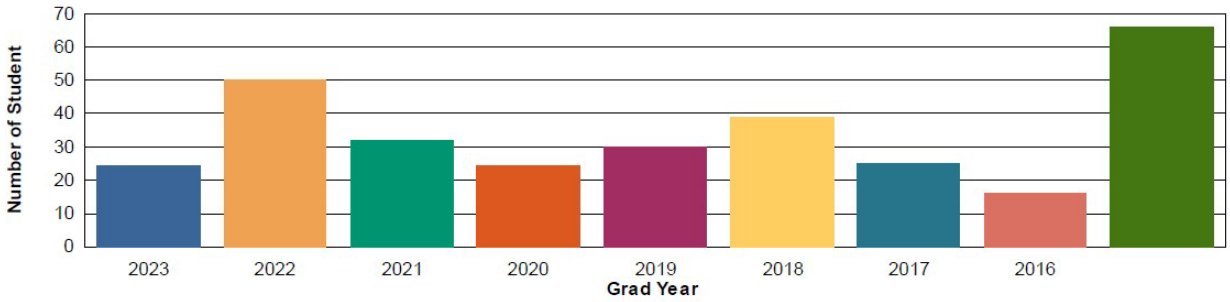
Thesis Advisor Report (*Individual Advisor*)

Dept: 800

Thesis Advisor: Mortlock, Robert F

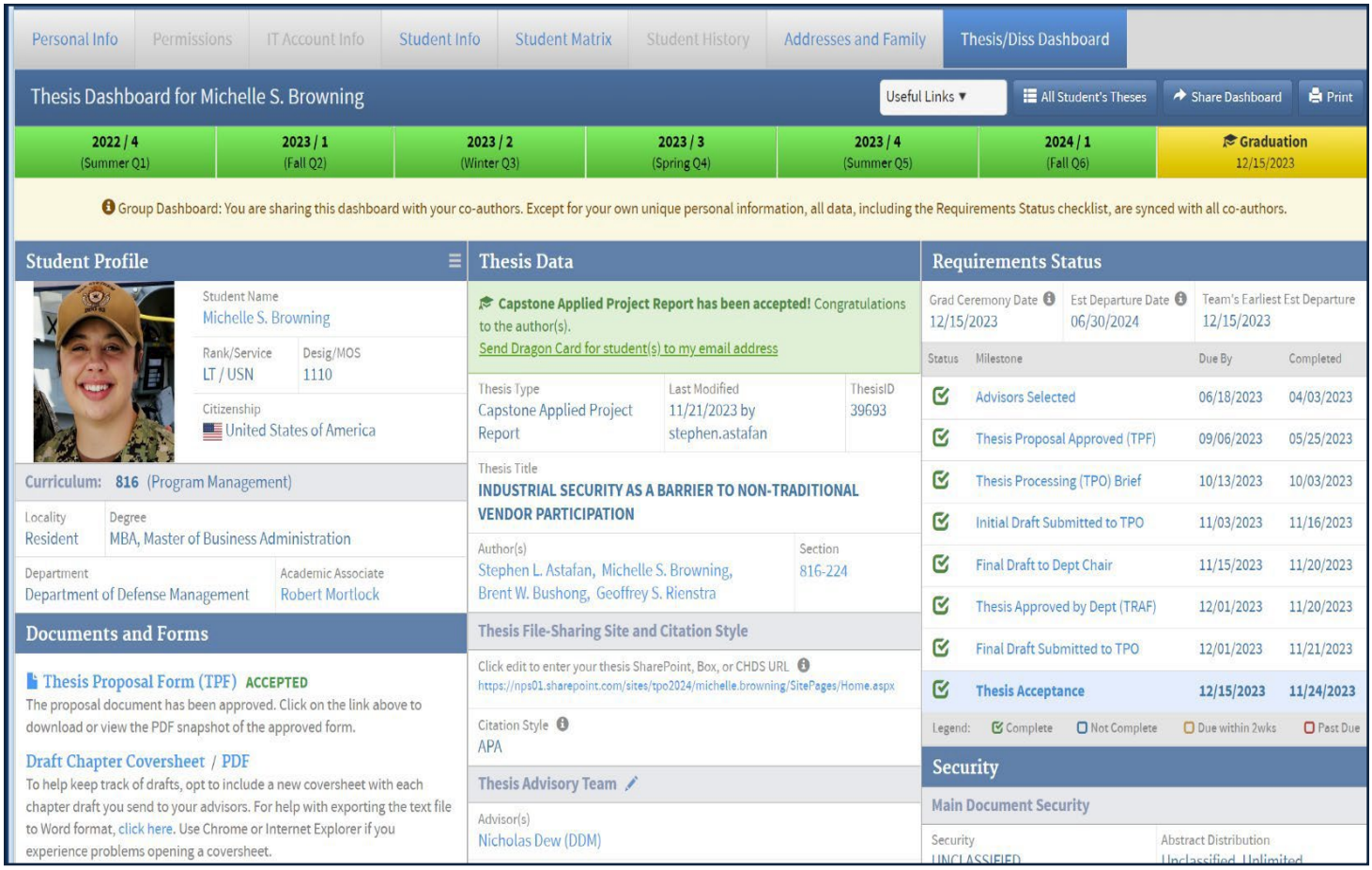
1/9/2024

Number of Students Advised / Grad Year



Grad Date	Advisor Type	Student	Curric #	Thesis Title
2023	**24 (Number of Students)**			
09/30/2023	Advisor	Gorham, Douglas Erik	836	T2S AND SUSTAINMENT PERFORMANCE OF ARMY GROUND COMBAT SYSTEMS
09/30/2023	Advisor	Muskeyvalley, Ray	836	T2S AND SUSTAINMENT PERFORMANCE OF ARMY GROUND COMBAT SYSTEMS
09/30/2023	Advisor	Sherrell, Jackie Ryan	836	POSEIDON ON PATROL: A COMPREHENSIVE ANALYSIS OF THE U.S. NAVY P-8A PROGRAM
06/30/2023	Co-Advisor	Adame, Brooke Love	836	AN ANALYSIS OF FACTORS INFLUENCING DEFENSE ACQUISITION DECISION MAK NOUSMAKING AND THE DEFENSE PROGRAM MANAGER
06/30/2023	Co-Advisor	Booc, Markanthony Lagroma	837	PORT VISIT SUPPORT STRATEGIES: A COMPARATIVE CASE STUDY BETWEEN HSP A NON-HSP
06/30/2023	Advisor	Bub, Kaitlyn Rebecca	836	ANALYSIS OF RAPID PROTOTYPING WITHIN THE DOD
06/30/2023	Advisor	Chan, Stanley	835	NAVAL ACQUISITION IN THE UNITED STATES AND RUSSIA
06/30/2023	Advisor	Christmas, Ryan David	836	CHANGE IN ACQUISITIONS MENTALITY IN REGARD TO ENGINEER KITS WITHIN T MARINE CORPS

Figure 12. Capstone Completion in Python



D.5.4: Description and evidence of the student support services provided to meet the needs of students as appropriate to the program mission.

- **Evidence is required. Evidence could include a link to a webpage and screenshot for any services offered to students, and/or examples of any published material on student support services.**

Graduate Writing Center (GWC)

Student academic support services have continued to improve (see Appendix I for a discussion).
Established in 2015, the GWC helps NPS residents and distance learning students develop writing and critical thinking skills through a variety of tools such as coaching, workshops, online resources, student publications and more. Importantly, the GWC reports a reasonable number of our students (390 of 2,075 NPS students) using it. We believe this is important, because all our students complete a capstone project (e.g., a thesis or an MS professional report). Additionally, our students have access to editorial support through both the Acquisition Research Program and a DDM contract, which leads students to rely on editors to "clean things up. (Link at: https://nps.edu/web/gwc)

International Graduate Program Office (IGPO)

The IGPO aids our international students, with their admission procedure and requirements like TOEFL testing and score, and preparatory courses, provides connections between academic units at NPS, Dept of State, DoD, combatant commands, US embassies and foreign/partners ministries of defense/interior to enhance core missions, provides orientations of new international students into NPS and the local community, supports students' needs and help them navigate difficult times to adjust to their new environment. (i.e. dealing with tragedies, sensitive issues, or government related matters), facilitate international exchanges for research, joint programs and provide connections between academic units at NPS, Dept of State, DoD, combatant commands, US embassies and foreign/partners ministries of defense/interior to enhance core missions.

The office also sponsors a seminar covering topics like internationally recognized human rights and the American democratic way of life. Areas of emphasis introduced during the seminar include civil-military relations, human rights, relationships in a democratic society, U.S. Government Institutions, and a comparative look at the U.S. free enterprise system. This seminar is required.

Additionally, international students are offered the opportunity to participate at the Field Studies Program (FSP) sponsored by the United States Government. It is funded from international tuition and includes numerous local and regional trips like local events around Monterey quarterly trips to San Francisco, Stanford University and the University of California at Berkeley, the state capitol, Sacramento, national landmarks like Yosemite National Park and trips to our nation's capital, Washington D.C, with side trips to the Gettysburg battlefield and the United States Naval Academy. (Link at: https://nps.edu/web/igpo)

Teaching and Learning Commons

NPS has a Teaching and Learning Commons, which serves as an umbrella organization that integrates a variety of NPS educational support offices and supports and funds innovative teaching initiatives across campus with mini grants. These grants can extend to students.
NPS also offers funding to recapitalize laboratories. While STEM labs are the obvious beneficiaries, DDM maintains its own computer laboratories and needs to recapitalize the computers and software regularly. Additionally, NPS has an ongoing initiative to develop the "Classroom of the Future", to which we are providing inputs. (Link at: https://nps.edu/web/tlc)

T**he Center for Educational Design, Development, and Distribution**, which provides instructional design and media development services is another example of NPS fully mature support office. (Link at : https://faculty.nps.edu/dl/GEAC/index.html#:~:text=Center%20for%20Educational%20Design%2C,to%20promote%20the%20NPS%20mission)

NPS Extended Campus (NEC)
Specific to distance learning students and faculty, the NEC team is available and ready to support distance learning teaching/administrative needs. NEC assist with course design, media development, communications, program development, and DL student support:

- ***Administrative Support Technicians*** can provide part-time student ed tech support for DL programs, particularly during times where a surge capability is needed (such as the start of a quarter or a new cohort).
- ***Graphic Designer*** can create course banners and branded promotional program materials.
- ***Educational Programmer*** can build interactive media, such as simulations and animations, that can be integrated into your Sakai site.

- ***Instructional Designers*** can provide support for course design, implementing new teaching strategies, optimizing your Sakai site to fit your needs, and maximizing the instructional tools based on DL best practices.

- ***Videographers*** can assist with creating course introduction videos and lecture videos. Our videography team can also work with you to edit and enhance previously recorded course content. Additionally, we have our One Button Studio available for faculty use in the library.

- ***Web Designer*** manages NPS Online and keeps it up to date with the latest DL offerings and information. They can assist with updating the content and display of your DL curricula on the site.

Special Guest Lecturers
NPS conducts a regular (at least quarterly) series of special guest lectures that are required for all students; most of these feature talks by senior defense and/or industry officials. Speakers have included commanders of major military commands (4-star generals and admirals), many of whom studied at NPS, to the former executive chairman of Google and Alphabet, who taught at NPS in the 1990s.

DDM Guest Speakers
Our curricula regularly host guest speakers in their respective areas to lecture on curriculum specific matters. These occur several times during the year and include sponsor visits during the biennial curriculum reviews. The opportunities include discussions concerning current issues in the profession as well as career advising.

Special needs and Reasonable Accommodations
NPS provides a variety of services to all students that have specific needs and required specific accommodations. Program Officers usually coordinate among faculty, staff, and the students to make all the adjustments necessary — in class, on-line, in the curriculum—to meet students' needs. The process is private and restricted only to faculty and/or staff on a need-to-know basis. (Link at: https://nps.edu/web/gwc/special-needs-reasonable-accommodation#:~:text=NPS%20students%20with%20disabilities%20can,needs%20of%20students%20with%20disabilities)

D.5.5: Description and evidence of adequate and accessible library resources to support the expected level of academic achievement, including library services, holdings, and digital resources.

- **Evidence is required. Evidence could include a link to the library website with a screenshot, a list of library holdings and/or digital resources, and any other published material about the library resources.**

The Dudley Knox Library at NPS contributes to learning, research, and teaching through relevant and evolving collections, tools, services, and spaces designed for NPS patrons. Please refer to appendix 31, section D.5 for a complete list of resources and services offered by our library. (Library webpage: https://library.nps.edu/)

D.5.6: Description and evidence of adequate and accessible facilities and technology to support the program and the needs of the students.

- **Evidence is required. Evidence could include published material describing the facilities and technology provided to students, webpages with screenshots, and/or photos of facilities and technology provided to students.**

Within our department we have designated two laboratories equipped with workstations that support software tools with Microsoft package. The laboratories are open every weekday and during the weekends at any hour. The Simulation and Ideation Lab for Applied Science (SILAS) used for gaming and simulation to train contracting officers and measure how the military buys and delivers weapons and supplies; the Acquisition Research Program (ARP), that provides "warfighter-focused acquisition research that informs and improves acquisition policy and practice. ARP research connects military and civilian acquisition professionals, policymakers in DoD and Congress, industry, and acquisition researchers from a range of federal and independent institutions. At NPS, ARP supports 60-80 graduate student research

projects each year". Students are also invited to participate in conferences and present papers. Several students have presented student papers at PMI Global Congresses. If selected, the PM Department provides financial support to attend these conferences. DDM also supports the Program Management and Contracting Professional Certification that give students the opportunity to complete required acquisition professional certifications. (Link at: https://nps.edu/web/ddm/dawia-training)

Additionally, the Project Management and Professional Certification that support students to earn PMP credentials in two different ways for students who are in the MSPM 836 and the MSDPM 816 programs and students who are not in these programs. (Link at: https://nps.edu/web/ddm/pmp-cert)

The NPS Information Technology and Communications Services (ITCS) handles all the requests for IT-related service—problem resolution, new computer equipment, application or web services, network questions, firewall requests, telephone, or project-related needs— begin with the Technology Assistance Center (TAC) which supports the day-to-day operations of students, faculty, and staff at NPS.

Information Technology and Communications Services (ITCS) link: https://nps.edu/web/technology.

D.5.7: Description of opportunities for students to participate in student and/or professional societies and activities that contribute to professional preparation and/or societal impact.

- **Evidence is optional. Evidence could include published material about student and professional societies and activities, webpages with screenshots of student and/or professional societies, or related opportunities or events.**

The students in the 816 and 836 degrees are already members or are aspiring members of the DOD acquisition workforce, mostly in the program management functional area. The DoD has statutory requirements to maintain the acquisition profession to Defense Acquisition Workforce Improvement Act (DAWIA) standards with requirements for years of experience, and training courses from the Defense Acquisition University (DAU). Students in the 816 and 836 programs earn fulfillment credit for DAU training courses required for the Practitioner level of Program Management. The program is described in DAWIA Training - Department of Defense Management - Naval Postgraduate School (nps.edu).

Additionally, 816 and 836 students are given the opportunity to join PMI and earn their PMP credentials. The program is described in Project Management Professional Certification - Department of Defense Management - Naval Postgraduate School (nps.edu) .

NPS Student Services is the principal organization responsible for oversight, coordination, and administrative support of the university's student population, regardless of the accession source. In that role, the mission of Student Services is to provide support for the duration of your time as a student, from enrollment through graduation. (Link at: https://nps.edu/web/students)

D.5.8: Description and evidence of regular assessment of student support services.

- **Evidence is required. Evidence could include measures used to assess student support services such as surveys, focus groups, or informal assessments, the assessment results, and how the results are used.**

In addition to course/instructor CEFs, and degree program exit surveys, NPS is a DoD/Naval Education institution which requires annual command climate surveys (see appendix 32, section D.5) and frequent inspections and Inspector General reviews. Students feedback in these reviews, assessments and audits contributes greatly to improving the NPS education and research missions.

D.6 Financial Resources

The program should demonstrate that the institution allocates adequate and sustainable resources for the program to achieve its stated objectives. To demonstrate that the above standard is met, the program shall submit the following information:

D.6.1: Description and evidence of financial resources to execute and sustain the program.

- **Evidence is required. Evidence could include a program budget for at least the past two years including budget funds and actual amounts spent, revenue and expenses, endowments, scholarships, or grants.**

Table 10. Program Budget FY2022-2024

Actuals	FY22	FY23	FY24
NPS Direct Navy Budget	$ 99,624,000.00	$ 103,736,000.00	$ 101,194,000.00
NPS Reimbursable Funding	$ 29,297,454.00	$ 30,550,000.00	$ 33,500,000.00
DDM Direct Navy Budget	$ 6,927,448.00	$ 5,846,248.00	$ 5,990,136.00
DDM Reimbursable Funding	$ 1,440,000.00	$ 2,140,982.00	$ 2,700,939.00
816 Degree Program Direct Navy Budget *	—	—	—
836 Degree Program Reimbursable Funding *	—	—	—

* We could not decisively separate program costs for 816 and 836.

Please note that the NPS Direct Navy budget and DDM Direct Navy budget is based on DIRECT MISSION SUPPORT. The NPS Reimbursable funding includes all NPS Indirect, Resident Tuition, and FMT (not reimbursable research, no RDT&E. The DDM Reimbursable Funding includes reimbursable DDM Resident Tuition and DDM FMT (not reimbursable research).

D.6.2: Description and evidence that the program's financial resources are regularly assessed to ensure sustainable support for the program faculty, student learning, and services.

- **Evidence is required. Evidence could include a program budget for at least the past two years including budget funds and actual amounts spent, revenue and expenses, endowments, scholarships, or grants, and adjustments to the program's budget from year to year based on assessment results.**

NPS participates in the DoD planning, programming, budgeting, and execution system (PPBES) annual process. This continuous process sets annual budgets, programs five years of funding, and plans funding for 10 years. Each year, NPS request budget funding to the Navy, which is rolled up in the DoD budget request or rolled up in the President's budget request. Congress then authorizes the funding in annual authorization bills and appropriates the funding in annual appropriation bills.

DDM inputs funding requirements each year the NPS Director of Financial Management and Comptroller as well as the Enterprise Resource Manager (ERM), who build the NPS request for funding from the Navy. The Navy is funded through annual authorizations and appropriation bills written by Congress and approved by the President. An example, of input from the Acquisition Sciences for the program management areas in terms of funding for teaching is the following: for academic year (AY) and fiscal year (FY) 2024, the PM teach course demand was for 25 direct funded, resident courses and 21 reimbursable funded, DL course for non-resident students for a total of 46 courses. The NPS Comptroller applies a standard course cost model for each course. The full time non tenure track (NTT) faculty required to teach 46 courses assuming each NTT faculty teaches the normal 8 course load is 5.75 full time equivalent NTT faculty members. The faculty members are also compensated for leadership duties such as Department Chair, Associate Chair, Assistant Chair, and Academic Associate duties.

End of Self-Assessment Report Template