ACADEMIC POLICY MANUAL

Naval Postgraduate School
Last amended on 17 November 2021

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Chapter 1: Purpose of this Document

(Approved April 1993) (Amended October 27, 2004)

The items listed below comprise the material appropriate for this document:

1. State the Purpose, Authority, and Structure of the Council: Academic Council composition, standing committees, processes for conducting Council business.
2. State Properties of the NPS Curriculum: statement of policies concerning the modification and creation of degree and academic certificate programs, statement of policies regarding special programs, degrees with distinction, accruing credit for degrees, thesis extensions.
3. State Policies Regarding the NPS Teaching Environment: actions and procedures followed by the registrar, grading procedures, changing the curriculum.
4. State Policies for Conducting Council Business: procedures for leading Council meetings, responsibilities within the Council and interfacing the Council with the greater University.
5. State Policies Concerning the Manual: provide a list for circulation of changes, procedures for altering the contents of the Manual; allocate responsibilities for accuracy of sections.

These are the only matters appropriate for inclusion in the Manual. Other matters are not to be included without the explicit revision of this section.

Chapter 2: Composition, Purpose and Structure of the Academic Council

2.1 Statement of Academic Council Purposes and Authority

(Approved February 16, 1994) (Amended October 27, 2004) (Amended January 25, 2012)

The purpose of the Academic Council is to establish, monitor, review, certify, and advise on policies and procedures which will ensure high and consistent academic standards of graduate and undergraduate education throughout the Naval Postgraduate School. It will prosecute this responsibility by:

1. reviewing curricula and degree and academic certificate program requirements;
2. by adjudicating exceptions and deviations from standard procedures in particular instances or special circumstances;
3. and by advising the Provost on ways to maintain and improve the quality of education at the school.

The Academic Council shall concern itself both with quality control aspects of the School's academic programs and with ways to promote the development of academic excellence in the unique context of professional graduate education. At the request of the Provost, the Academic Council shall also provide advice and assistance in formulating, revising and clarifying the educational mission of the School.

The Academic Council is authorized to:

1. approve new degree and academic certificate programs and major alterations to existing degree and academic certificate programs;
2. approve nominations for degrees;
3. approve nominations to candidacy for doctoral degrees;
4. append the accolade of With Distinction to individual master's degrees;
5. approve special programs of study.

Any matter subject to the Council's approval must be submitted to the Council for its consideration.

2.2 Composition of the Council

(Approved February 16, 1994) (Amended January 25, 2012)

The Academic Council shall have membership representing:

- the administration of the School,
- representatives from each of the academic departments and academic groups,
- representatives from other academic units as designated by the Provost,
- representatives from other academic units as designated by the Council.

Membership requirements and election procedures are listed in the following sections.

2.2.1 Officers from the School At Large

(Approved February 16, 1993) (Amended January 12, 2007) (Amended January 25, 2012)

- Provost
- Vice Provost for Academic Affairs
- Dean of Students
- Director of Programs
- Chair of Faculty Scholarship committee
- Registrar, non-voting member

2.2.2 Officers from Academic Units

(Approved February 16, 1994) (Amended December 5, 2001) (Amended January 12, 2007) (Amended January 25, 2012)

In addition, there shall be membership on the Council from each of the following academic units:

A. Schools
- Graduate School of Defense Management

B. Academic Departments
- Applied Mathematics Department
- Computer Science Department
- Defense Analysis Department
- Electrical and Computer Engineering Department
- Information Sciences Department
- Mechanical and Aerospace Engineering Department
- Meteorology Department
- National Security Affairs Department
- Oceanography Department
- Operations Research Department
- Physics Department
- Systems Engineering Department

C. Academic Groups
- Cyber Academic Group
- Space Systems Academic Group
- Undersea Warfare Academic Group

D. Academic Committees
- Systems Engineering & Analysis Curriculum Committee
- Modeling, Virtual Environments and Simulation

Academic Committee

Members of each academic unit shall elect from among their own number a representative and an alternate to the Academic Council. The Graduate School of Defense Management may elect two representatives. Nominees for these positions shall be approved by the responsible academic unit Chair prior to such election. The academic unit Chair and visiting faculty shall not be eligible to serve as Academic Council representative or alternate. If the Representative and alternate are both absent then the academic unit Chair can elect a temporary alternate.

Both the representative and alternate shall serve concurrent three-year terms. Terms shall be staggered so that approximately one-third of the elected membership will rotate each year. Representatives may be reelected by their academic units.

If a representative is unable to complete his/her term of office, the academic unit shall hold an election to replace the representative. The new representative shall start a new three-year term upon election.

2.2.3 Alternates

(Amended January 25, 2012)

No individual may serve as representative for two activities simultaneously.

The alternate, in the case of temporary absence of a representative, shall replace that representative at Academic Council meetings. Alternates shall have all the rights and responsibilities of regular representatives.

The Faculty Scholarship Committee may likewise select an alternate to serve in the temporary absence of its Chair.

2.3 Chair of the Council

(Approved February 16, 1994) (Amended January 25, 2012)

The Chair of the Council shall be the Provost of the Naval Postgraduate School. The duties of the Chair are:
1. to make appointments to standing committees;
2. to establish and compose ad hoc committees;
3. to chair meetings of the Council, including ensuring that rules of order are maintained during meetings;
4. to promote the interests of the Council with the full weight of his /her office.

The Chair may delegate responsibilities of the Chair to the Secretary of the Council. If the Chair of the Council is unable to attend a Council meeting, the Secretary of the Council will serve as Chair.

2.4 Secretary of the Council

(Approved February 16, 1994) (Amended January 25, 2012)

The post of Secretary of the Council shall be held by the Vice Provost for Academic Affairs of the Naval Postgraduate School.

The responsibilities of the Secretary are as follows:
1. to serve as meeting Chair for Council meetings in the absence of the Council's Chair;
2. to administer all correspondence of the Council, including oversight of the agenda package for each meeting, and to serve as the Council's point-of-contact for the School;
3. to allocate tasks to the standing committees of the Council according to their by-direction authority;
4. to confer with parties submitting agenda items which are not appropriate for Council consideration, referring the party to the appropriate office for consideration;
5. to execute by-direction authority as indicated in this document;
6. to make administrative changes to the Manual as required;
7. to designate the Recording Secretary of the Council.

2.5 Recording Secretary of the Council

(Approved January 25, 2012)

The Recording Secretary of the Council shall assist the Secretary of the Council in matters related to Academic Council business. The Recording Secretary shall be designated by the Secretary of the Council.

Responsibilities are as follows:
1. to act as the first point of contact for the Council;
2. create, distribute and post the agenda package for each meeting (in accordance with Sec. 3.2 (p. 8));
3. to record, publish and post the meeting minutes;
4. to maintain a current list of the membership of the Council, including alternates, and to notify the members of changes in Academic Council membership;
5. to maintain a repository of present and past agenda, exhibits and minutes;
6. to manage meeting logistics;
7. to maintain a list of those offices and individuals who require copies of the Manual, and to circulate the Manual to these parties in accordance with the policy expressed in section 3.7.3 (p. 10) of this document.

2.6 Standing Committees

(Approved February 16, 1994) (Amended January 12, 2007) (Amended January 25, 2012)

The Academic Council is comprised of five (5) standing committees as outlined in sections 2.6.3, 2.6.4, 2.6.5, 2.6.6, and 2.6.7.

2.6.1 Appointment

(Approved February 16, 1993)

Each standing committee shall consist of three or more members of the Academic Council, appointed by the Chair

of the Council. The Chair of each standing committee shall be elected by the committee members, and shall serve at the pleasure of the committee. No member of the Council shall serve simultaneously on more than one standing committee.

2.6.2 Replacing Members

(Approved February 16, 1993)

In the event that a member of a standing committee vacates his/her Council seat, the representative who replaces him/her as a member of the Council shall also replace him/her as a member of that standing committee, finishing the unexpired portion of the term.

However, if the vacating member is the Chair of a standing committee, an election for the Chair must take place before the next meeting of the Council.

A temporary absence of less than fifteen weeks does not create a vacancy.

2.6.3 Course Review Committee

(Approved February 16, 1993) (Amended January 25, 2012)

The purpose of the Course Review Committee is to inform and advise the Council on matters involving courses taught by the School.

The Committee considers requests for approval of new courses, requests for retirement of existing courses, and requests to modify existing courses. The Committee also establishes procedures and guidelines for adding, retiring, or modifying courses.

2.6.4 Curriculum, Certificate, and Degree Requirements Committee

(Approved February 16, 1993) (Amended October 27, 2004) (Amended January 12, 2007) (Amended January 25, 2012)

The purpose of the Curriculum, Certificate, and Degree Requirements Committee is to inform and advise the Council on matters involving the requirements a student must fulfill in order to earn a degree or academic certificate at the School.

The Committee shall consider the following types of requests:

1. requests submitted by academic units for the establishment of new curricula;
2. requests submitted by academic units for the establishment of new degree or academic certificate programs;
3. requests submitted by academic units for changing the requirements of existing curricula, degree, or academic certificate programs;
4. requests submitted by students, Program Officers, or Departments seeking the waiver of specific candidacy requirements, including requests for waiver of QPR requirements and requests for waiver of course requirements;
5. requests submitted by the Vice Provost for Academic Affairs that the Council formulate or modify policies involving curricula and degree and academic certificate requirements.

Examples of this last item include policies on course load restrictions, credit for thesis work, and Engineer's degree requirements.

2.6.5 Doctoral Committee

(Approved February 16, 1993) (Amended January 25, 2012)

The purpose of the Doctoral Committee of the Academic Council is to establish, monitor, review, certify, and advise on policies and procedures which will ensure high and consistent academic standards of Ph.D. programs throughout the Naval Postgraduate School.

At the request of the Academic Council, it will fulfill these responsibilities by:

1. formulating policies and procedures which pertain to the Ph.D. degree;
2. developing policies to maintain and improve the quality of Ph.D. education at the School;
3. reviewing new doctoral programs and changes to existing Ph.D. programs.

2.6.6 Special Programs Committee

(Approved February 16, 1993) (Amended January 17, 2007) (Amended January 25, 2012)

The purpose of the Special Programs Committee is to review all special degree programs at the School, to propose policies governing special programs and to recommend Council action on agenda items related to special programs.

Special degree programs at the School are considered to be but not limited to:

1. master's degree programs which have not been previously and explicitly approved by the Council;
2. internal dual degree programs;
3. thesis extension requests.

2.6.7 Nominations Committee

(Approved January 25, 2012)

The purpose of the Nominations Committee is to review all academic units' nominations for award of degrees and certificates, and to recommend to the Council actions concerning the quarterly Graduation list and quarterly With Distinction list. The Committee will ensure that nominations are in accordance with section 7.1 (p. 25) and 7.2 (p. 25) of the Manual.

2.7 Ad Hoc Committees

(Approved February 16, 1993) (Amended January 17, 2007)

Ad hoc committees may be created by the Council to perform specific functions on a one-time basis. The size and membership of ad hoc committees is determined by the Chair of the Council. The members of ad hoc committees may serve simultaneously on other committees of the Council.

Chapter 3: Authority, Procedures and the Operation of the Academic Council

3.1 Standing Committees' Authorities and Actions

(Approved February 16, 1993)

Each standing committee shall have by-direction authority over a subset of the matters that come under the authority of the Council. In order to exercise its by-direction authority, a quorum of the subcommittee must be raised for a vote.

Meeting agenda shall indicate matters which have been considered for by-direction decisions since the last meeting of the Council, and the standing committee shall report the results of their deliberations to the Council during the meeting. Support data for by-direction decisions shall be distributed with meeting agenda.

The allocation of by-direction authority is given in detail in the following sections.

3.1.1 Course Review Committee

(Approved: February 16, 1993)(Amended January 25, 2012)

The Course Review Committee possesses by-direction authority to approve changes to previously approved courses and to reinstate previously-retired courses. Issues involving course modification requests that cannot be resolved within the Committee will, at the discretion of the Committee Chair, be submitted to the full Council for approval or disapproval.

It possesses no by-direction authority to approve new courses.

3.1.2 Curricula, Certificate, and Degree Requirements Committee

(Approved: February 16, 1993) (Amended October 27, 2005) (Amended January 17, 2007) (Amended August 18, 2021)

The Curriculum, Certificate, and Degree Requirements Committee has by-direction authority to approve or disapprove the following types of requests:

1. requests for transfer of credit from another institution;
2. requests to extend the time to remove grades of Incomplete.
3. requests for exceptions to Academic Certificate requirements.

3.1.3 Doctoral Committee

(Approved: February 16, 1993)(Amended January 25, 2012)(Amended September 15, 2021)

The Ph.D. Committee has by-direction authority to approve or disapprove:

1. advancement to candidacy;
2. passage of dissertation defense;
3. final degree nominations.

In addition, the Ph.D. Committee has by-direction authority to approve minor deviations from standard procedures for attaining a Ph.D. at the School.

3.1.4 Special Programs Committee

(Approved: February 16, 1993) (Amended January 17, 2007) (Amended January 25, 2012) (Amended August 21, 2013)

The Special Programs Committee has by-direction authority to approve or disapprove:

1. master's degrees which have not been previously and explicitly approved by the Council;
2. internal dual degree programs.

3.1.5 Nominations Committee

(Approved: January 25, 2012)

The Nominations Committee possesses no by-direction authority.

3.2 Agenda and Timing of Meetings

(Approved February 16, 1993) (Amended January 17, 2007) (Amended January 25, 2012)

Meetings of the Council shall be held at least twice per quarter. Meeting dates, previous meeting minutes, and agenda will be circulated to:

1. Council members
2. Program Officers
3. Academic Associates
4. Academic Unit Chairs
5. Academic Deans

no later than one week prior to Council meetings.

The agenda of meetings of the Council will follow the following outline:

1. roll call and approval of the minutes of the previous meeting;
2. communications, including requests for inclusion of items on future agenda;
3. old business;
4. new business:
    a. reports of ad hoc committees;
    b. reports of standing committees;

c. other new business;

5. adjournment.

Business items may be disposed in one of the following ways:

1. approval with or without amendment;
2. disapproval;
3. tabled or referred.

Tabled items will appear as old business at the next meeting.

3.3 Procedures for Running Academic Council Meetings

(Approved February 16, 1993) (Amended January 25, 2012)

Unless otherwise stated in the Academic Policy Manual, meetings of the Academic Council shall be conducted in accordance with Robert's Rules of Order, Newly Revised, [2]. Robert's Rules of Order shall be liberally interpreted.

3.4 Procedures for Reaching the Academic Council with a Request

(Approved February 16, 1993) (Amended January 25, 2012)

Requests to the Council are made by written memoranda. A memorandum should be addressed to the Academic Council, via the Vice Provost for Academic Affairs.

A memorandum making a request of the Council should be received by the Vice Provost for Academic Affairs via the Recording Secretary no later than two weeks prior to the Academic Council meeting.

3.5 Notification of Council Decisions

(Approved February 16, 1993)

Those petitioning the Council with a request shall be notified of the result of their request via written memorandum from the Recording Secretary of the Council.

3.6 Appealing a Council Decision

(Approved February 16, 1993)

Decisions made by-direction for the Council by committees may be appealed to be heard by the entire Council. The departmental representative to the Council, the student's Program Officer, the Academic Associate, or the academic unit Chair may present the case before the entire Council for a decision by vote of the Council.

Decisions made by the Council as a body may be appealed only on the basis of additional information being brought forth that was not considered by the Council when it made its original decision. Interested parties will present the added information to the Council who will judge if the case is to be reheard by the Council.

There is no appeal of the final actions of the Council to any other body or office.

3.7 Policies Pertaining to The Academic Council Policy Manual

3.7.1 Revising the Existing Manual

(Approved April 1993) (Amended January 17, 2007) (Amended January 25, 2012)

The contents of the Academic Policy Manual are controlled solely by the Council. Any content revision to the Manual requires:

1. distribution to Council members, Academic Deans, academic unit Chairs, Departmental Ph.D. Committee Chairs, Academic Associates, and Program Officers two weeks in advance of any vote;
2. a majority vote for approval taken from a quorum of the Council.

The Secretary of the Council has the authority to make any necessary administrative revisions to the Manual and will inform the Council and others of such changes.

3.7.2 The Process for Complete Revision of the Manual

(Approved April 1993) (Amended January 17, 2007)

The process for revision of the entire Manual flows as follows:

1. The Secretary of the Council will constitute a temporary Manual Rewrite Committee. The Secretary will, at this time, establish a deadline for the delivery of the new Manual and inform the Academic Council of the existence and powers of the Rewrite Committee. The Secretary must identify a Chair of the Rewrite Committee.
2. The Rewrite Committee will submit a plan for their task. This plan will include a skeleton Manual, this skeleton to include:
   a. major section headings for the new Manual;
   b. identification of sections of the old Manual that will be retained, either verbatim or with minor revision;
   c. identification of sections which need major revision or invention.
   d. identification of tasking for writing sections which need major revision or invention.
   e. identification of responsibilities for managing each major section of the document.
3. The Council must approve this document skeleton.
4. The Rewrite Committee will task others as specified in the skeleton document, and is empowered to impose reasonable deadlines on those tasked.
5. Each section or subsection of the new Manual will be approved individually. If the Council feels that the

section being presented is too large to consider for a single vote, the Rewrite Committee Chair may spontaneously disassemble the section into subsections. The Chair may then seek Council approval on some or all of these subsections. Hence, each approval vote will be two-phased:

   a. the Council must approve a motion to vote on the section as a single item;

   b. the Council must approve the section.

6. The Rewrite Committee may present any number of sections to the Council for approval in any meeting, provided these sections are distributed to the Council at least one week in advance.

7. Where applicable, the contents of sections of the new Manual will supersede the contents of the existing manual at the time of approval.

8. The Council may consider revision of approved Manual revisions following the procedures for revising the existing Manual.

9. After all content of the Manual is approved, the Rewrite Committee will propose a set of stylistic standards for the Manual, including but not limited to the format of the document to be maintained, the section numbering system to be used, and any online facilities for accessing the Manual.

10.   The Rewrite Committee will move for approval on the entire revision. Upon approval of this motion, the old Manual will be retired and the Rewrite Committee disbanded.

3.7.3 Circulation of the Manual

(Approved February 16, 1993) (Amended January 17, 2007) (Amended January 25, 2012)

The following individuals are entitled to and are expected to possess a copy of the current Academic Policy Manual:

1. Council members

2. Academic Associates

3. Academic unit Chairs

4. Program Officers

5. Departmental Ph.D. Committee Chairs and individuals appointed to supervise Engineer's Degree programs.

6. Deans

It is the duty of the Recording Secretary of the Academic Council to maintain a current list of these individuals and to provide them with updates of the Manual as substantive modifications occur.

In addition, the Secretary of the Council shall be responsible for maintaining an online copy of the Manual, which is accessible through campus-wide computer network services.

Chapter 4: Admission to Degree Programs

4.1 Bachelor of Science Degrees

(Approved February 16, 1993) (Amended January 25, 2012) (Amended May 15, 2013)

A student holding a high school degree or equivalent may enroll in a Bachelor's degree program.

A student who is enrolled in a program leading to a graduate degree in a specialty which is different from his/her Bachelor's degree may petition the Council for a Bachelor's degree Certificate of Equivalence. The student must have completed all the requirements for a Bachelor's degree and apply via the provisions outlined in section 5.1 of this Manual. Students who have completed graduate programs, or who have failed to complete a graduate program, also enjoy this privilege.

The Naval Postgraduate School is not currently admitting students for or awarding Bachelor's degrees.

4.2 Master's Degrees

(Approved February 16, 1993) (Amended January 25, 2012) (Amended January 27, 2021)

An individual applying for admission to a master's degree program must possess a baccalaureate degree from an institutionally accredited educational institution—or in the case of foreign students, a recognized institution—with a minimum grade point average of 2.2 on a 4.0 system, of which 75 graded semester-hours or 112 graded quarter-hours must have been taken.

If the candidate does not possess an undergraduate degree the following are standards for admission to a program leading to a graduate degree:

1. A minimum of 100 semester-hours or 150 quarter-hours of undergraduate work must have been completed at a regionally accredited institution with an average grade of ''B''. Courses in which grades lower than ''C'' were earned will not be counted in the total. Courses which have been duplicated on various transcripts should be counted only once in arriving at the total number of hours to be credited.
2. The general education requirements prescribed for the Naval Postgraduate School baccalaureate degree must be satisfied. These requirements are outlined in section 5.1 (p. 12) of this Manual.
3. No more than 20 semester-hours may be credited for work done in non-degree granting service schools.
4. Final approval of the applicant will be made by the appropriate academic unit Chair.

4.3 Engineer's Degrees

(Approved February 16, 1993)

Entrance requirements for Engineer's Degree programs include:

1. all requirements for general graduate admission;
2. departmental approval.

4.4 Ph.D./Doctoral Degrees

(Approved February 16, 1993)

An individual applying for admission to a Ph.D./Doctoral program must hold a Bachelor's degree qualifying the student for graduate status in the academic unit of his/her major study, or shall have completed an equivalent course of study. All applications shall ultimately be submitted to the Director of Admissions who shall be responsible for processing to the academic units. The Director of Admissions will forward all applications to the appropriate departmental Ph.D./Doctoral Committee to determine applicant acceptability. The Chair will recommend appropriate action to the Director of Admissions, who will notify applicants.

Detailed instructions on requirements for PhD applications can be found in the Doctoral Program Admissions section of the NPS Course Catalog.

Chapter 5: University Degree Requirements

(Amended October 15, 1995)

This section details the University-wide requirements for obtaining degrees. Each Department offering a degree has a set of requirements which are a superset of those listed here. Individual degree requirements are listed in the NPS Academic Catalog.

5.1 Bachelor's of Science/Arts Degree

(Approved April 13, 1994) (Amended January 25, 2012) (Amended May 15, 2013)

The Naval Postgraduate School is not currently admitting students for or awarding Bachelor's degrees.

The Bachelor degree may be awarded for successful completion of a course plan provided the course plan has been previously presented by the academic unit awarding the degree, reviewed by the Curriculum, Certificate and Degree Requirements Committee (sec. 2.6.4) and approved by the Academic Council. Such course plans shall conform to current practice in other accredited institutions and shall contain a well-defined major. Each academic unit is qualified to offer a major field of study for a Bachelor's degree. Academic units wishing to grant the Bachelor's degree must maintain a current list of required courses.

A student wishing to pursue a Bachelor's degree program must receive approval from the Council via the Chair of the academic unit awarding the degree prior to matriculating into the degree program.

General NPS minimum requirements for Bachelor's degrees include:

1. 180 quarter-hours of which 90 hours must be numbered 2000 or above.
2. One academic year in residence.
3. General education requirements:
   a. 24 quarter hours in the Humanities and Social Sciences.
   b. 36 quarter hours in Mathematics and Physical Sciences.

In addition, the student must complete all of the courses required by his/ her major academic unit, and must have a 2.0 TQPR upon graduation.

5.2 Master's Degrees

(Approved November 16, 1994) (Amended January 24, 2007) (Amended January 25, 2012) (Amended August 21, 2013)

The master's degree may be awarded for successful completion of a curriculum which has the approval of the Council as meriting the degree.

General NPS minimum requirements for a master's degree program include the following:

1. 32 hours of graduate level courses, of which 24 hours must be earned from NPS.
2. A thesis or its equivalent, except in cases where the Academic Council has specifically approved a course-only option or curricula.

In addition a student must also possess:

1. a 3.0 or higher GQPR;
2. a 2.75 or higher CQPR

to graduate with a master's degree.

5.2.1 Thesis or Capstone Project Advisor Qualifications

(Approved April 13, 1994) (Amended January 25, 2012) (Amended June 11, 2014) (Amended September 16, 2015) (Amended November 14, 2018)

Naval Postgraduate School faculty holding the rank of Professor, Associate Professor, Assistant Professor, Professor of the Practice, Senior Lecturer, Lecturer, Research Professor, Research Associate Professor, or Research Assistant Professor, equivalent military faculty and sponsored chairs covered by an active MOA, may serve as thesis or capstone project advisors if approved by the academic unit Chair who has cognizance of the degree. NPS staff, emeritus faculty, faculty of other academic institutions and members of Naval or other Department of Defense or U.S. Government laboratories with relevant expertise may serve as co-advisor with one of those listed above if approved by the Chair of the academic unit.

5.2.2 Joint Theses

(Approved April 13, 1994)

Joint authorship of a master's thesis by two or more students is allowed by the Council, but may be restricted by the major academic unit.

5.2.3 Time Limits for Completing the Master's Degree

(Approved February 15, 2017) (Amended June 9, 2021)

All requirements for completing the master's degree must be completed within a period of five years after advancement to candidacy.

Students who must depart NPS prior to the completion of their master's degree must request a continuation of their candidacy through their academic unit. A candidacy continuation request is required to maintain candidacy regardless of the nature of the degree incompletion (e.g., incomplete thesis or project, incomplete coursework, or change of duty status.)

The student shall submit the candidacy continuation request to their academic unit for approval/disapproval. Continuations may be granted by the academic unit up until the point at which the student has reached the five-year limit on their master's degree candidacy, after which, a candidacy extension request must be submitted to the Academic Council.

The academic unit will follow one of two procedures to ensure the candidate's status is recorded with the Office of the Registrar:

1. For an incomplete thesis or capstone project: the academic unit shall annotate approval/disapproval of the candidacy extension in the student's PYTHON Thesis Extension Form (TEF).

2. For any other form of incomplete degree requirements: the academic unit shall send an email notification of the decision to the Office of the Registrar.

5.2.4 Advancement to Master's Candidacy

(Approved June 9, 2021)

A student is considered to be a master's degree candidate at the start of the first quarter of enrollment in a master's degree program at NPS. In cases of students enrolled in internal dual degree programs within the Naval Postgraduate School (see section 7.6), master's candidacy begins for all simultaneous degrees at the time of advancement to candidacy for the first degree.

5.2.5 Master's Degree Candidacy Extension

(Approved June 9, 2021)

The candidate's academic unit Chair may request one extension of a student's master's candidacy for up to two years if the student is otherwise making adequate progress toward the degree and if the delay can be attributed to factors largely beyond the student's control. Requests for candidacy extension must be received by the Academic Council before candidacy has expired. The duration of each extension will be granted on a case-by-case basis as determined by the academic unit. Requested duration of extension will be measured in academic quarters or years.

See section 5.2.6 for the rules governing reinstatement of a student's master's degree candidacy.

5.2.6 Restoring a Lapsed Master's Candidacy

(Amended June 9, 2021 and renumbered - previously 7.5.1, *Incomplete Degrees: Thesis Extensions.*)

The following procedures apply in any case where a student has allowed their master's degree candidacy to expire.

1. The student must submit a request for candidacy reinstatement to the appropriate academic unit.

2. The academic unit chair shall submit to the Academic Council a recommendation to approve or disapprove reinstatement. The recommendation must include at a minimum:

a) The student's formal request for reinstatement.

b) The chair's explanation of events resulting in the expiration of candidacy, including a delineation of remaining academic work required to complete the degree.

c) The chair's recommendation to approve or disapprove the request.

d) Endorsement of the approval or disapproval from the student's service or organization sponsor

e) Endorsement of approval/disapproval from any and all instructors or advisors that may be involved in the student's delinquent work. In the case of approval, these endorsements must include a detailed timeline for completion.

3. The Academic Council decides whether to accept, reject or approve a modification to the academic unit's recommendation.

5.3 Engineer's Degrees

(Approved November 16, 1994) (Amended January 17, 2007) (Amended January 25, 2012)

An Engineer's degree may be awarded successful for completion of a program preapproved for this degree.

The NPS requirements for an Engineer's degree are as follows:

1. 72 hours of graduate level courses beyond the bachelor's level, including greater than 30 hours in courses numbered 4000 or above; and

2. a thesis approved by the academic unit.

The student must complete all departmental requirements for the degree, and must possess a GQPR of at least 3.0 upon completion of the program.

A maximum of 27 hours of graduate level courses, including no more than 12 hours numbered 4000 or higher, may be waived in consideration of course hour credits acquired in pursuit of an appropriate master's degree from another institution. Students need not request formal transfer of credit for this purpose, but must gain departmental approval for this waiver.

5.4 Ph.D. Degrees

(Approved May 5, 1995) (Amended January 25, 2012)

The degree Doctor of Philosophy is awarded as a result of meritorious and scholarly achievements in a particular field of study which has been approved by the Academic Council as within the purview of the Naval Postgraduate School. A candidate must exhibit faithful and scholarly application to all prescribed courses of study, achieve a high level of achievement, and establish an ability for investigation leading to original contributions to fundamental knowledge.

Any program leading to the degree Doctor of Philosophy

requires the equivalent of at least three academic years of study beyond the baccalaureate level, with at least one academic year (or its equivalent) being spent in residence at the Naval Postgraduate School.

5.4.1 Sequence of Events Leading to a Ph.D.

(Approved May 5, 1995) (Amended January 25, 2012) (Amended October 29, 2014) (Amended September 16, 2015) (Amended January 29, 2020) (Amended September 15, 2021)

The following is a general outline of a student's progress through the program, with amplification in subsequent paragraphs:

1. **Admissions:** The student applies for admission to the program and is accepted.
2. **Dissertation Committee:** The departmental Ph.D. committee nominates, for approval by the Academic Council, a dissertation committee, which henceforth bears the responsibility for the study program, and for general guidance in research program. Until the dissertation committee is named, the departmental Ph.D. committee has the responsibility to oversee the student's study program.
3. **Study Program:** The study program may, at the discretion of the student's major academic unit, include one or more minors, a foreign language requirement or a computing requirement. All doctoral students must maintain continuous course registration throughout their programs. After their subject matter coursework has been completed and until advancement to candidacy, doctoral students must register in xx5805 Dissertation Proposal Preparation each academic quarter. Following advancement to candidacy, each doctoral student must register in xx5810 Dissertation Research each quarter until final completion of their degree. Doctoral students who are not registered in any course following the add/drop period of a quarter will be disenrolled from their curriculum by the Registrar after consultation with the department and notifying the student.
4. **Qualifying Exam:** When the student's study program is essentially complete, the departmental Ph.D. committee or those it designates on its behalf, administers a written and oral qualifying examination. All minor departmental requirements must be satisfied prior to taking the oral qualifying examination.
5. **Dissertation Supervisor and Chair:** The departmental Ph.D. committee names one or more members of the dissertation committee to be dissertation supervisor, a single member to be dissertation Chair, and certifies to the Registrar that each individual so named is qualified under the guidelines of this Manual.
6. **Advancement to Candidacy:** Upon successful completion of the study program, any minor, language or computing requirements, passage of the written an oral qualifying examinations and approval of a Doctoral Research Proposal, the student becomes eligible for advancement to candidacy. The departmental Ph.D. committee then recommends that the Academic Council advance the student to candidacy for the doctorate.
7. **Dissertation Defense:** When the candidate's investigations are complete and the dissertation has been submitted, the dissertation committee administers a final oral dissertation defense.
8. **Approved Dissertation:** When all members of the dissertation committee, the major academic unit Chair, and the Vice Provost for Academic Affairs have approved the dissertation and have signed the dissertation approval and release form (DRAF) and the final acceptance email from the thesis processing office are submitted to the Recording Secretary of the Academic Council.
9. **Nomination for Degree:** After the unanimous recommendation of the dissertation committee and the completion of all other degree requirements, the Academic Council makes the final decision to nominate a candidate for the award of the Ph.D. degree.

5.4.2 Departmental Ph.D. Committee

(Approved May 5, 1995) (Amended January 25, 2012) (Amended January 29, 2020) (Amended October 28, 2020)

Each academic unit offering a Ph.D. degree must have a standing Ph.D. committee. It shall be the responsibility of the departmental Ph.D. committee to oversee the Ph.D. program for the academic unit. Among the duties of the departmental Ph.D. committee are the following:

1. Ensuring that the Ph.D. program designed for each student conforms to the minimum requirements imposed by the Academic Council in this Manual.
2. Determining any standing requirements, beyond those of the Academic Council, that must be fulfilled by all Ph.D. students in the academic units.
3. Nominating, for approval by the Academic Council, the members of each Ph.D. student's dissertation committee, the dissertation supervisor, and certifying to the Council that the dissertation supervisor is qualified to hold that position.
4. Overseeing the administration of the written and oral qualifying examinations for each Ph.D. student, and insuring that the nature of those examinations conform to the requirements of this Manual.
5. Requesting that the Academic Council advance a student to candidacy for the Ph.D. degree upon approval of a dissertation committee, Doctoral Research Proposal, and successful completion of all screening, minor, language, computing, and qualifying requirements and exams.

Prior to the naming of a dissertation committee including a dissertation supervisor and chair, the departmental Ph.D. committee has the responsibility of supervising the

student's program of study. After the naming of the dissertation committee and dissertation supervisor, the departmental Ph.D. committee retains the responsibility of overseeing the activities of the dissertation supervisor and the dissertation committee, maintaining quality control of the departmental Ph.D. program.

*In this Manual, "departmental" shall refer to anybody with the authority to recommend candidates for the Ph.D. degree, as approved by the Academic Council.

5.4.3 Selection of Dissertation Supervisor, Dissertation Chair, Dissertation Committee, and Doctoral Research Proposal

(Approved May 5, 1995)(Amended October 30, 2013)(Amended January 29, 2020)(Amended October 28, 2020)

The departmental Ph.D. committee nominates a dissertation committee, to be approved by the Academic Council. The departmental Ph.D. committee shall designate one or more members of the dissertation committee to be the dissertation supervisor, and the departmental Ph.D. committee must certify to the Academic Council that the individual(s) so named are qualified under the requirements of this Manual. The student, in conjunction with the dissertation supervisor, identifies a dissertation topic and submits a Dissertation Research Proposal which must be approved by the dissertation committee. The departmental Ph.D. committee also designates the member of the dissertation committee who shall serve as dissertation committee chair, if that person is to be different from the dissertation supervisor or if there are multiple dissertation supervisors.

5.4.4 The Dissertation Committee

(Approved May 5, 1995) (Amended September 27, 2000) (Amended January 25, 2012) (Amended January 29, 2020)

The candidate's dissertation committee, once established, is responsible for supervising the candidate's completion of his/her degree, including completion of course of study, dissertation research, and production of the dissertation document.

The dissertation committee is nominated by the departmental Ph.D. committee, and will consist of five or more members. The departmental Ph.D. committee shall designate one or more members of the dissertation committee to be the dissertation supervisor and one member to be dissertation chair.

5.4.5 Responsibilities and Qualifications of the Dissertation Committee

(Approved May 5, 1995) (Amended January 29, 2020) (Amended November 18, 2020)

The dissertation committee is responsible for supervising candidates' completion of their degree, including completion of course study, preparation and grading of

the written qualifying examination, dissertation research, and production of the dissertation document. The dissertation committee is also responsible for administering and determining the results of the final dissertation defense.

Qualifications and specific responsibilities of dissertation committee members are as follows:

Chair:
1. Responsible for research quality and progress. Nominates student to the Academic Council for degree award.
2. Full-Time Faculty in the Degree Granting Dept.
3. An earned doctorate.
4. Experience in thesis advising.
5. May also serve as Supervisor.

Supervisor:
1. Supervise the student's program of study in accordance with the requirements of the major academic unit and Academic Council.
2. A doctorate in the his/her field of specialty.
3. Experience in thesis advising.
4. Activity and productivity in research, as evidenced by recent publications of his or her research in recognized journals, or a broad reputation as a productive researcher in his or her field of specialty. Other evidence may be considered which is pertinent to demonstrating research activity or productivity.
5. May also serve as Chair.
6. The supervisor role may be shared by one or more individuals, but only one supervisor may also serve as chair.

Members:
1. Five or more members are required, counting the Chair and Supervisor(s).
2. At least four members must be full-time NPS employees.
3. At least four members must hold an earned Doctorate.
4. At least one member must be from outside the academic unit granting the degree. This member must be NPS faculty.
5. One or more members of the committee may be from another university or appropriate institution.
6. The committee may contain no more than two members who have not earned the doctorate.

5.4.6 The Doctoral Research Proposal

(Approved May 5, 1995) (Amended January 25, 2012) (Amended October 28, 2020)

Once the Doctoral Research Proposal is approved by all members of the Dissertation Committee, theDepartmental Ph.D. Committee submits a request recommending that the Academic Council advance the

student to candidacy for the Ph.D. degree. Affirmative action by the Academic Council on this request will require that:

1. a dissertation committee has been approved by the Academic Council;

2. a dissertation supervisor and chair have been named by the departmental Ph.D. committee, and approved by the Academic Council;

3. any minor, language, or computing requirements have been fulfilled;

4. the written and oral qualifying examination have been taken and passed;

5. the Doctoral Research Proposal has been approved by all committee members.

The distinct requirement of the doctorate is the successful completion of a scholarly investigation leading to the original and significant contribution to knowledge in the candidate's major area of study. The subject of the investigation must be approved by the dissertation committee, and must be submitted to the Council no later than the time of the request for advancement to candidacy.

5.4.7 Minor Fields, Language, and Computer Related Requirements

(Approved May 5, 1995)

The program of study may, at the discretion of the major academic unit, include one or more minor fields suitable to the needs of the student and to the research to be undertaken. Such requirements may be satisfied within the major academic unit or through another academic unit, as specified by the major departmental Ph.D. committee. Any minor requirement will be satisfied by procedures specified by the academic unit of the minor; these may include written or oral examinations, completion of a sequence of courses, etc.

An up-to-date written statement of minor field procedures, including the format of written or oral examinations, must be filed by each academic unit with the Academic Council.

If a language requirement or computing requirements are to be satisfied, the student is to demonstrate proficiency before an examiner appointed by the departmental Ph.D. committee, or through completion of an appropriate sequence of courses approved by the departmental Ph.D. committee.

5.4.8 Written Qualifying Examination

(Approved May 5, 1995)

The written qualifying examination is a comprehensive test of the student's basic knowledge of and skills in the major area. The exam is the responsibility of the departmental Ph.D. committee, and is administered by this committee or by faculty members whom the departmental Ph.D. committee designates to act on its behalf.

The written exam is administered after the student's program of study is essentially completed. An up-to-date written statement of the format and procedures of the examination must be filed by each academic unit with the Academic Council.

Passage of the written qualifying examination requires a unanimous vote of the departmental Ph.D. committee or those faculty members designated to act on its behalf.

If the student fails the first written qualifying examination, the departmental Ph.D. committee may grant a second examination opportunity to the student. If the privilege of re-examination is granted, the time period within which it must be accomplished is specified by the departmental Ph.D. committee, but it shall not exceed 12 months. Only two opportunities for passage are allowed.

5.4.9 Oral Qualifying Examination

(Approved May 5, 1995) (Amended March 26, 1997, December 15, 2004) (Amended January 17, 2007) (Amended January 25, 2012) (Amended 19 August, 2020)

The oral qualifying examination may be scheduled only after successful passage of the written qualifying examination and fulfillment of any major and minor field requirements, language requirements, and computer competency requirements.

The oral qualifying examination is the culmination of the course of study. The purpose of the oral qualifying examination is to test basic knowledge and creative ability and to demonstrate the student's capacity to use material from the course of study. As such, the oral qualifying exam must not be focused on any specific research topic nor focused on the Doctoral Research Proposal. The oral qualifying examination shall contain no prepared presentation; its format shall be exclusively question-and-answer.

Passage of the oral qualifying examination requires a unanimous vote of the examiners. All departmental Ph.D. committee members or those designated on their behalf must be present during all phases of the oral exam. There must be a minimum of three examiners. An Academic Council representative must be present.

Whenever the Academic Council representative becomes of the opinion that the examination is not being conducted in accordance with the Policy of the Academic Council, the representative should suspend the examination and require that the Oral Examination be rescheduled. The representative should report the reasons for this decision to the Academic Council and to the departmental Ph.D. committee concerned as soon as possible. Such a finding should never be deemed a "failure" of the Qualifying Examination.

The extent of participation of all parties is determined by the departmental Ph.D. committee or those designated to act on its behalf.

The Academic Council representative must attend all phases of the oral examination, and shall report to the Academic Council that the examination was conducted in accordance with the rules of this Manual. Attendance at the oral qualifying exam is delineated in Table 5.1.

If the student fails the first oral qualifying examination, the departmental Ph.D. committee, or those acting on its behalf, may grant a second examination opportunity to the student. If the privilege of re-examination is granted, the time period within which it must be accomplished is specified by the departmental Ph.D. committee, but it shall not exceed 12 months.

Table 5.1 Attendance and Voting Privileges for Oral Qualifying

Category	Oral Qualifying Exam
Departmental Ph.D. Committee members or those acting on its behalf	A, B, C, D
Academic Council Representative	A, B, C
Other faculty	E
Examinee	A
Students, Staff, and Visitors	E

A: will attend Interrogation Phase, B: will attend Comment Phase, C: will attend Voting Phase, D: will Vote, E: may attend Interrogation Phase.

5.4.10 Report of Examination

(Approved May 5, 1995)

The result of the qualifying examinations must be reported to the cognizant Program Officer, the Vice Provost for Academic Affairs, and to the Academic Council, not later than two weeks after the scheduled date of the oral qualifying examination. Each member of the departmental Ph.D. committee, or those designated to act on its behalf shall sign the report.

The Academic Council representative must submit a written report on the oral qualifying examination. The report is sent to the Academic Council to verify that the oral examination was conducted in accordance with the rules of the Academic Council.

5.4.11 Time Limits for Retaking the Qualifying Examination

(Approved May 5, 1995)

If a student, on first attempt, fails the qualifying examination, he or she may be re-examined only once, and only if the departmental Ph.D. committee, or those acting in its behalf, so recommend.

No student may take the oral qualifying examination more than twice.

The departmental Ph.D. committee, or those acting on its

behalf, may recommend that only prescribed parts of the examination be repeated. If the privilege of re-examination is granted, the time period within which it must be accomplished is specified by the departmental Ph.D. committee, but it shall not exceed 12 months.

5.4.12 Advancement to Candidacy

(Approved May 5, 1995) (Amended January 25, 2012) (Amended January 29, 2020) (Amended October 28, 2020)

Once the Doctoral Research Proposal is approved by all members of the Dissertation Committee, the Departmental Ph.D. Committee submits a written request recommending that the Academic Council advance the student to candidacy for the Ph.D. degree. Affirmative action by the Academic Council on this request will require that:

1. a dissertation committee has been approved by the Academic Council;
2. any minor, language, or computing requirements have been fulfilled;
3. the written and oral qualifying examination have been taken and passed;
4. the Doctoral Research Proposal has been approved by all committee members.

5.4.13 Dissertation Defense

(Approved May 5, 1995) (Amended 15 December 2004) (Amended January 25, 2012)

When the dissertation research has been completed, the Ph.D. candidate prepares a draft of the dissertation and provides a copy to each member of the dissertation committee for approval. Upon the dissertation committee's unanimous acceptance of the draft as the basis for a dissertation defense, the dissertation committee chair notifies the departmental Ph.D. committee and provides it with a draft of the dissertation. The dissertation committee chair schedules the final dissertation defense. This examination must be scheduled later than one week after the submission of the draft of the dissertation to the departmental Ph.D. committee.

A minimum of six months must elapse between successful completion of the oral qualifying examination and the defense of the dissertation.

All members of the dissertation committee are required to attend the final defense and the entire Academic Council is invited to attend. The Academic Council shall designate a representative, who must attend the dissertation defense. In the final dissertation defense, the candidate presents the dissertation and is subject to such questions as the entire dissertation committee deem appropriate. The extent of participation of all parties is determined by the dissertation committee chair.

Attendance at the final dissertation oral examination is delineated in Table 5.2.

Whenever the Academic Council representative becomes

of the opinion that the defense is not being conducted in accordance with the Policy of the Academic Council, the representative should suspend the defense and require that the dissertation defense be rescheduled. The representative should report the reasons for this decision to the Academic Council and to the departmental Ph.D. committee concerned as soon as possible. Such a finding should never be deemed a "failure" of the dissertation defense.

Table 5.2 Attendance and Voting Privileges for Dissertation Defenses

Category	Oral Final Exam (Dissertation Defense)
Dissertation Committee	A, B, C, D
Academic Council Representative	A, B, C
Other faculty	E
Examinee	A
Student, Staff, and Visitor	E

A: will attend the defense, B: will attend Comment Phase, C: will attend Voting Phase, D: will Vote, E: may attend the defense.

5.4.14 Report of Successful Defense

(Approved May 5, 1995) (Amended January 25, 2012)

The results of the final dissertation defense are reported to the Academic Council by the dissertation committee Chair via a memorandum signed by all dissertation committee members.

The Academic Council representative must submit a written report on the dissertation defense. The report is sent to the Academic Council to verify that the defense was conducted in accordance with the rules of the Academic Council.

5.4.15 Approved Dissertation

(Approved January 25, 2012) (Amended October 29, 2014)

Upon final acceptance of the dissertation, the dissertation approval and release form shall be signed by each member of the dissertation committee, the major academic unit Chair, and the Vice Provost for Academic Affairs. These signatures indicate approval of the dissertation.

5.4.16 Award of the Degree

(Approved May 5, 1995) (Amended January 25, 2012) (Amended October 29, 2014) (Amended January 29, 2020)

Three documents are forwarded from the Chair of the dissertation committee to the Academic Council before the Council's last meeting in the quarter of graduation:

1. The dissertation approval and release form with all the required signatures certifying the dissertation meets degree requirements.
2. Copy of the final acceptance email from the Thesis Processing Office.
3. A memo from the Chair of the dissertation committee recommending the student for the degree are forwarded to the Academic Council before the Council's last meeting of the quarter of graduation. The Academic Council will make the final decision whether or not to nominate the candidate for the award of the Doctor of Philosophy degree.

No candidate shall participate in the graduation ceremony for the award of the degree until the President of the Naval Postgraduate School has accepted the Council's recommendation. The final version of the dissertation will be submitted to the Vice Provost for Academic Affairs at least one day before graduation.

5.4.17 Time Limits for Retaking the Dissertation Defense

(Approved May 5, 1995)

If a candidate, on first attempt, fails the final dissertation defense, then he/she may be re-examined only once, and then only if the dissertation committee so recommends. If the privilege of re-examination is granted, the time period within which it must be accomplished shall be specified by the dissertation committee, but it shall not exceed 12 months.

5.4.18 Time Limit for Completing the Ph.D.

(Approved May 5, 1995)

All requirements for completing the Ph.D. degree must be completed within a period of five years after advancement to candidacy.

5.4.19 Candidacy Extension

(Approved January 25, 2012)

The candidate's academic unit Chair may request an extension of a student's candidacy if the student is otherwise making adequate progress and if the delay can be attributed to factors largely beyond the student's control. Requests for candidacy extension must be received by the Academic Council before candidacy has lapsed. The duration of each extension will be granted on a case-by-case basis. Requested duration of extension will be measured in academic quarters or years.

5.4.20 Termination of Candidacy

(Approved May 5, 1995)

If, in the judgment of the dissertation committee, a candidate does not qualify for the degree, Doctor of Philosophy, the dissertation committee recommends that the Ph.D. program be terminated, and suggests an appropriate course of action for the candidate. The departmental Ph.D. committee must notify the Academic

Council that this recommendation has been made. When the Academic Council has satisfied itself concerning all outstanding questions involved and has agreed upon any necessary action, the candidate's dissertation committee is dissolved by a formal vote of the Academic Council.

5.4.21 Restoring a Lapsed Candidacy

(Approved May 5, 1995) (Amended January 25, 2012)

Due to time limitations for completion of the Ph.D. program and the unique demands faced by NPS students once they have completed their residence, there may be instances in which a student wishes to renew their pursuit of a Ph.D. after their candidacy has lapsed.

The following procedure is designed for renewing Ph.D. candidacy:

1. The student initiates the request (to the academic unit) for reinstatement of Ph.D. candidacy.
2. The departmental Ph.D. committee, or special committee it designates, evaluates the reinstatement request. The committee shall seek answers to the following questions:
    a. Should the candidacy be reinstated?
    b. What will be required to reinstate candidacy (e.g., course work, written and/ or oral qualifying examinations for both major and minor areas of concentration?

Any request by the student to waive retaking the qualifying examinations should be submitted in writing to the academic unit at the beginning of the process.

After evaluating the student's request for reinstatement to candidacy, the departmental Ph.D. committee makes a recommendation to the Academic Council.

The recommendation should include:

1. Recommendation as to whether the student's candidacy should be reinstated.
2. Statement of any conditions necessary for the reinstatement of candidacy, such as retaking one or both of the qualifying exams.
3. Nomination of the dissertation committee.
4. Signatures of the departmental Ph.D. committee Chair.
5. Signatures of all members of the nominated dissertation committee.

The Academic Council decides whether to accept or reject the departmental Ph.D. committee's recommendation. The request to the Academic Council should contain documentation of the process and a narrative describing the reasoning behind the recommendation.

If the Academic Council approves the student's request, the academic unit Chair instructs the student on his or her status and what will be necessary to reinstate the candidacy.

Per section 5.4.18 (p. 18), all requirements for the Ph.D. must be completed within five (5) years of the reinstatement to candidacy.

Chapter 6: Courses

6.1 Student Records

6.1.1 Grading Procedures

(Approved November 16, 1994) (Amended March 25, 1998) (Amended January 25, 2012) (Amended June 8, 2016)

A graduate student's performance will be evaluated by giving a letter grade as described below:

The A grade states that the student has shown excellent insight, competence, and great depth of understanding in attaining course outcomes in the aspect of the discipline under study. For graduate students in graduate level courses, this implies mastery of course content at the highest level.

The B grade states that the student has shown competence and an acceptable level of understanding in attaining course outcomes in the aspect of the discipline under study. For graduate students in graduate level courses, this implies an adequate level of achievement, although a B- grade indicates a marginally acceptable performance.

The C grade states that the student has shown marginal to unsatisfactory performance and understanding in attaining course outcomes in the aspect of the discipline under study.

The D grade indicates unsatisfactory performance and an inadequate level of understanding in attaining course outcomes. The D grade states that the student has given little to no evidence of understanding or ability in the discipline.

The X grade indicates unacceptable performance.

Quality Points are assigned to letter grades as outlined in Table 6.1.

Table 6.1 Quality Points and Letter Grades

Performance	Letter Grade	Quality Points
Excellent	A	4.0
	A-	3.7
	B+	3.3
	B	3.0
	B-	2.7
	C+	2.3
	C	2.0
	C-	1.7
	D+	1.3
	D	1.0
Failing	X	0.0
Incomplete	I	-
Withdrew	W	-
Non-graded	N	-
Pass	P	-
Fail	F	-
Thesis Research	T	-

A student's total quality point rating, herein referred to as TQPR, is calculated as:

$$TQPR = \frac{\Sigma_{courses} \text{ course hours} * \text{Quality Points}}{\text{total course hours}}$$

See Table 6.1

This score is based only on graded courses taken at NPS. The graduate QPR, GQPR, is defined to be the QPR constructed from courses numbered 3000 and above. CQPR is a QPR which is constructed from courses taken as part of the student's designated curriculum. Students enrolled in multiple degree programs may require a separate CQPR for each. Graduate level students should also note that while a B- grade (2.7) is considered marginally acceptable for an individual course, it is cause for concern as the cumulative GQPR must still be a 3.0 to qualify for graduation.

Course hour value is defined as the scheduled number of weekly lecture hours plus one-half of the scheduled number of laboratory hours as listed in the NPS Course Catalog. Courses which do not follow the lecture/laboratory framework shall have hour-equivalent course hours designated.

The grades of "P'' and "F'' are intended for use in courses of such a nature that it is difficult to establish reference levels for the award of traditional grades. Courses often subject to this difficulty include seminars, directed study, and experimental courses.

Courses may be listed as pass/fail only after such a designation is approved by the Council.

A student in a degree program who wishes to take courses not in his or her normal program may also elect to take them in the Pass/Fail mode. Approval must be granted by the student's cognizant Program Officer and academic unit Chair. It is the responsibility of the student to exercise the P/F option by informing the instructor in writing at the time of enrollment that a P/F grade is desired. A copy of the approval request shall be forwarded to the Registrar. Students electing to receive the P/F grade in letter graded courses may not apply the hours toward the degree and

curriculum requirements of any program. P/F grades are not counted in computation of the student's QPRs.

6.1.2 Course Credit for Master's Thesis Work

(Approved November 16, 1994)

Credit hours of 0 lectures, 8 laboratories (0-8) will be granted for each thesis slot registered for provided it is on the student's course matrix. Thesis credit shall be graded pass/fail, thus it is not used in computation of the student's QPRs.

6.1.3 Credit Hour Policy

(Approved: May 16, 2012)

A credit hour is an amount of work represented in intended learning outcomes and verified by evidence of student achievement that reasonably approximates not less than:

1. One hour of classroom or direct faculty instruction and a minimum of two hours of out-of-class student work each week for approximately ten to twelve weeks for one quarter hour of credit, or the equivalent amount of work over a different amount of time; or
2. At least an equivalent amount of work as required in paragraph (1) of this definition for other academic activities as established by NPS, including laboratory work, internships, practica, and other academic work leading to the award of credit hours.

6.2 Registration for Courses

(Approved April 13, 1994) (Amended January 25, 2012)

Each student must be registered in each course in which he/she is a candidate for credit. Registration for courses taught on the standard NPS quarterly calendar must take place not later than the tenth school day of the quarter (holidays excluded).

No student will receive credit for a course unless registration in that course has been approved by one of the following:

1. the student's Program Officer or Academic Associate;
2. the Chair of the student's dissertation committee (departmental Ph.D. committee prior to naming of a dissertation committee);
3. the Vice Provost for Academic Affairs.

6.3 Course Designators

(Approved November 16, 1994) (Amended January 25, 2012)

Courses offered at NPS are designated with a six-symbol code, concatenating

1. a two-letter code for the course subject;
2. a four-character code designating the course, the leading character of which designates the level of the course.

Courses are designated by level as in table 6.2.

Table 6.2 Course Designators and Levels

Course Number	Level
5000-5999	Doctoral
4000-4999	Graduate
3000-3999	Graduate or Upper
	Division Undergraduate
2000-2999	Upper Division Undergraduate
1000-1999	Lower Division Undergraduate
0000-0999	Non-credit

6.4 Auditing Courses

(Approved April 13, 1994)

Individuals may be allowed to audit courses on a space-available basis with the approval of the professor teaching the course. When approval is obtained to audit, students may attend classes, but they have no entitlement to neither submit papers, questions, or tests for grading nor consume the instructor's time outside of class. Auditors will receive no grade for the course, no credit toward graduation, and no formal recognition of accomplishment for courses they have audited.

6.5 Course Enrollment Limitations

(Approved April 13, 1994) (Amended January 25, 2012)

Without special permission, a student may enroll for no more than 17 total credit hours per quarter.

1. A student may enroll in more than 17 and less than 21 total credit hours only with explicit permission of the Academic Associate in consultation with the Vice Provost for Academic Affairs.
2. A student may enroll in 21 or more hours only with explicit permission of the Provost.

If an established degree program's course matrix includes a quarter with more than 17 hours, the students in the program need not apply for a course enrollment limitation waiver. This limit is automatically waived in these cases.

6.6 Special Situations

6.6.1 Credit by Examination

(Approved November 16, 1994)

The award of credit solely on the basis of examination for any 1000 or 2000 level course is permissible. Grades for such courses shall be awarded on a pass/fail basis.

6.6.2 Validation

(Approved November 16, 1994)(Amended January 25,

2012)

A student with the appropriate background may validate a course that is required for his/her curriculum. Validation will allow the student to omit that course from the program of study. However, no credit will be granted for a course that has been validated. The basic purpose of course validation is to make optimal use of the student's time at the Naval Postgraduate School. Every validation must be justified by documented evidence of prior work in the area of the course to be validated.

The validation of a course must be approved in writing by the Chair of the academic unit offering the course or by someone designated in writing by the chair to act for him/her in this regard. Specific criteria for validation (e. g., review of the student's transcripts or examination on the material of the course) are left to the discretion of the cognizant academic unit Chair.

After validating one or more courses, it is permissible for a student to complete his or her program in less than the maximum time allowed, to include additional elective courses in the program, or to devote additional time to thesis research with the concurrence of the Academic Associate.

6.6.3 Transferring Credit

(Approved November 16, 1994)(Amended January 17, 2007)(Amended January 25, 2012)(Amended September 15, 2021)

1. Course Transfers within NPS

   When a student changes curricular programs, credit towards graduation for courses taken as part of the former program may be granted by the Program Office, Academic Associate and Chair of the receiving academic unit, or his/her agent, responsible for the new program.

   The receiving Program Officer will advise the Registrar upon approval to transfer course hour credits.

2. Course Transfers from Another Institution applied to NPS Bachelor's

   The Naval Postgraduate School is not currently admitting students for or awarding Bachelor's degrees.

   Courses completed at another accredited institution with a grade of "C" or better may be considered for credit toward a baccalaureate degree at the Naval Postgraduate School. Such course hour credits must be acceptable as applying directly to meeting degree requirements or as being appropriate electives.

   A maximum of 108 quarter-hours of transfer credit may be allowed of which, at most, 18 quarter-hours

will be accepted as upper division course hour credits. Not more than 90 quarter-hours will be transferred from a junior college; such course hour credits will be accepted as 1000 level course hour credits.

Appropriate courses taken at another accredited institution with a grade of ``B'' or better after receipt of a baccalaureate degree may be considered for transfer for credit toward a graduate degree at the Naval Postgraduate School provided the course was not used to meet requirements for an awarded degree from that or any institution.

Comparability of the nature, content, quality, and level of transfer credit, and the appropriateness and applicability of the credit earned to NPS programs must be determined by the academic unit responsible for the program towards which the credit will be applied. This information may be obtained from catalogs, course syllabi, and other materials, and from direct contact between knowledgeable, experienced faculty and staff at both NPS and sending institutions. Justification of comparability will be submitted to the Academic Council.

3.

   Course Transfers from Another Institution applied to NPS Master's

   Graduate credit for courses completed more than three years prior to admission to a graduate degree program will not be awarded on the basis of transcripts alone. Credit for such courses can be granted upon successful passage of a departmental examination. This procedure is distinct from course validation, where no course credit is granted.

   Courses taken at another accredited institution before receipt of an undergraduate degree may be considered for transfer for credit toward a graduate degree provided:
   The courses are the equivalent of courses numbered 3000 and above at the Naval Postgraduate School. The courses proposed for transfer are not necessary to meet the bachelor's degree requirements. The student has earned a "B" grade or better in such courses.

   No more than 25% of the minimum course credits required for the graduate degree may be received as transfer credit. The Registrar shall transfer credit from another institution only upon approval from the Academic Council. Transfer credits based on courses completed at another institution shall not be used in computation of quality point rating.

A special dispensation exists for students in the Cooperative NPS/Test Pilot School program. Students in this program may be granted 12 hours of 4000 level credit upon graduation from the Test Pilot School phase of the program. Students whose course of study includes programs at the Test Pilot School and NPS are also eligible for this benefit.

4. All coursework for an Academic Certificate must be NPS courses.

6.6.4 Withdrawal from a Course

(Approved November 16, 1994) (Amended January 17, 2007)

Each student will receive a grade in every course in which the student is registered. If a student drops a course after registering in it, the mark will be ``W'' if the professor considers that the student was passing at the time of withdrawal, and ``X'' if the student was failing. A mark of ``W'' will not have any effect on the student's scholastic standing. A grade of ``W'' may not be assigned after the end of the eighth week of a quarter.

6.6.5 Repeating Courses to Improve Grades

(Approved November 16, 1994)

Students may retake a course to improve their grade in that course. The repetition must be taken at the Naval Postgraduate School and is subject to the approval of the Program Officer, Academic Associate, and the academic unit Chair concerned. The Registrar is to be notified at the beginning of the retaken course via a memo from the student. For the purpose of records, both the original and the repeated courses are to be shown on the student's academic transcript. For the purpose of computing QPRs, the credit hours of the course shall be counted once, using the grade received from the most recent time that the student enrolled in the course.

6.6.6 Incomplete Courses

(Approved November 16, 1994)

Students who are enrolled in a course but do not complete all of the assignments or the final examination may, at the discretion of the instructor, be granted a grade of incomplete, "I."

A grade of incomplete is removed by the instructor when all requirements are satisfied. The instructor notifies the registrar of the course grade at this time. If the incomplete is not resolved within one quarter, it transforms into a failing grade of "X." Requests to extend the time limit for resolving grades of incomplete must be submitted to the Curricula, Certificate and Degree Requirements Committee of the Academic Council.

6.6.7 Extended Absences

(Approved November 16, 1994)

The academic record of a student may be deleted completely for a given term when he/she is absent for a portion of the term for medical reasons, military duties, family tragedy, or other extenuating circumstances. The transcript will show "Excused for the term.'' Such excusals shall be requested by the Program Officer and approved by the Vice Provost for Academic Affairs, or designee.

6.6.8 Course Enrollment by Non-matriculated U.S. Students

(Approved August 15, 2018)

U.S. Students eligible for enrollment to NPS, who are not currently admitted to a degree or certificate program, may register in individual courses as non-matriculated or exploratory students. Students must meet institutional admission criteria as outlined in Section 4.2 and secure the approval of the assigned instructor and the department or academic unit associated with the course they wish to take. Individual departments and academic units may establish additional criteria for single course enrollment students in courses they offer.

Non-matriculated U.S. students may accumulate up to twelve NPS transcript credits, after which further course registration is restricted pending admission into a degree or certificate program.

6.7 Course Syllabus

(Approved February 15, 2017)

Every NPS course shall have a complete and up-to-date syllabus. The course syllabus shall be developed by the instructor and maintained by the academic unit owning the two-letter code in the course designator. Course syllabi shall be available to faculty and NPS administration and others designated by NPS. The course syllabus introduces and explains why the course is important and outlines the methods the faculty/instructor plans to use to help students learn. The course syllabus is a principal means of communicating the purpose, content and objective of each course, and shall be provided to students enrolled in the course at the beginning of the quarter in which the course is offered.

A course syllabus should contain the following elements:

1. **Catalog Description,** including the following:
    a. Course Number, title and credit hours;
    b. Course description (highlighting DoD/DoN relevance, as applicable);
    c. Time period of instruction; schedule; hours per week;
    d. Prerequisites and co-requisites;
    e. Security Classification, if any;
    f. Pass/Fail status, if applicable
2. **Statement of Course Objectives.** Course objectives identify the purpose and goal of the course. The course objectives are related to the Educational Skill Requirements and program learning objectives as well

as the disciplinary requirements established by the academic department.

3. **Statement of Course Learning Outcomes.** Course learning outcomes are explicit and measureable statements that clarify what students will learn, know, and be able to do with course content when they successfully complete a course. Course learning outcomes articulate specific knowledge items, logical activities, or specialized skills each student will be expected to demonstrate as a result of successful completion of the course.

4. **Course Topics and Schedule.** A detailed list of the modules and/or topics covered in the course. The topical organization of the course syllabus provides an overview of the depth and breadth of topical content of the course, the level of the material covered, the expected level of student performance, the amount of time devoted to each topic, and how the topics are related to the objectives of the course.

5. **Course Assignments.** This section identifies and describes the major assignments in the course designed to provide students the opportunity to synthesize course concepts and practice the skills that reinforce class instruction. Examples include exercises, projects, experiments, laboratories, papers, homework assignments and other such non-lecture activities.

6. **Textbooks and other Materials.** A list of proposed teaching material, e.g., textbooks, outside reading, published handouts, and/or laboratory materials.

7. **Assessment and Grading.** Provide the timing, type, and topical coverage for formative and summative assessment activities (homework, quizzes, examinations, presentations, papers, reports, etc.). Provide the grading approach and standards, as applicable. Describe the types of formal and informal measures that will be used to assess the course learning outcomes.

8. **Course Policies.** Include statements for general course policies – Student Honor Code, Academic Integrity, Plagiarism, Reasonable Accommodation for Disabilities, Expectation of Classroom Conduct, etc. This should spell out what the instructor expects from each student and what the students should expect from the instructor.The course syllabus and related learning/assessment activities should be adapted for resident and distance learning delivery formats, as appropriate.

Chapter 7: Degree Completion

7.1 Nomination for Degree

(Approved November 16, 1994) (Amended January 24, 2007) (Amended January 25, 2012) (Amended December 5, 2012)

Responsibility for initiating nominations of candidates for award of degrees shall rest with:

1. academic unit Chairs for regularly enrolled students under their cognizance;
2. academic unit Chairs for staff and faculty members under their cognizance.

Nominations for award of degrees shall be forwarded via the appropriate academic unit Chair to the Vice Provost for Academic Affairs.

Information to be included consists of:

1. degree to be awarded;
2. certification of successful completion of degree requirements;
3. candidate's GQPR and CQPR upon completion of degree requirements.

Academic unit Chairs will indicate by endorsement their approval of the award of the indicated degree.

The responsibility of the Vice Provost for Academic Affairs shall be to:

1. Submit for Council consideration a list of those nominated for degrees who meet all requirements.
2. Submit for Council consideration all borderline cases and all requests for waiver of school requirements for award of degrees.
3. Submit all recommended candidates for degrees with distinction to the Council for consideration.
4. Forward the Council's recommendations for award of degrees and award of degrees with distinction to the President.
5. Upon conferral by the President, forward the list of conferees to the Registrar for appropriate notations to student records and diploma processing.

7.2 Date of Degree

(Approved November 16, 1994) (Amended January 25, 2012)

Transcripts and diplomas will show that the degree was awarded with an effective date which corresponds to the end of the term in which degree requirements were completed, as certified by the Academic Council.

7.3 Degrees with Special Awards

7.3.1 Master's Degrees with Distinction

(Section 390 of old Manual) (Amended January 25, 2012) (Amended November 18, 2020)

The Academic Council will recommend certain students receiving master's degrees to the President for the award of their degrees With Distinction.

The students must be nominated to the Academic Council by the cognizant academic unit. Academic units are encouraged to develop criteria beyond the Quality Point Rating to evaluate outstanding student performance.

In any one academic year no more than ten percent (or one student, whichever is larger) of the students earning a master's degree in the degree programs of the nominating academic unit shall be nominated for degrees With Distinction.

Appropriate notation of the award shall be made on the students' academic records by the Registrar.

Academic Certificates, the Engineer's Degree and the Ph.D. are not awarded with distinction.

7.3.2 Outstanding Thesis Award

(Approved January 27, 2021)

The Academic Council will recommend to the President that certain students be recognized for their outstanding thesis work as a part of earning their master's degrees.

To be considered for the Outstanding Thesis award students must be nominated to the Academic Council by their cognizant academic unit. Academic units shall develop criteria to differentiate between acceptable theses and those which warrant such recognition and shall establish an internal committee for evaluating theses for nomination.

In any one academic year no more than 15 percent (or two students, whichever is larger) of the students earning a master's degree in the degree programs of the nominating academic unit shall be nominated for having completed an Outstanding Thesis.

The Registrar shall make appropriate notation of the award in the students' academic records.

7.4 Special Provision for Ph.D. Degrees

The Ph.D. degree has additional requirements for degree completion. (See section 5.4.16. (p. 18))

7.5 Special Conditions

7.5.1 Waivers for QPR and Course

Requirements

(Approved: November 16, 1994) (Amended January 17, 2007)

The Academic Council may, at its discretion, waive small deficiencies in quality point rating required for the award of an academic degree. Such waivers may be granted when there are extenuating circumstances adjudged by the Council to excuse temporarily poor academic performance.

Poor academic performance, such as lack of proper preparation, low grades in the early part of a curriculum, or poor performance in a particular subject, does not in itself constitute grounds for petition for a waiver.

A petition for waiver of QPR requirements must include the following documents:

1. detailed arguments in support of the petition
2. transcript of academic records
3. recommendations of the Program Officer, Academic Associate, and the academic unit Chair

In order to obtain additional information, the Council may, when considering the petition, request the presence of the appropriate representatives.

In each case in which a waiver is granted, the extenuating circumstances upon which the waiver is based shall be stated in the motion made to grant the waiver and recorded in the minutes of the Council.

7.5.2 Waivers for Failing Required Courses

(Approved: November 16, 1994) (Amended January 25, 2012)

Successful completion of a curriculum for the purpose of satisfying stated degree requirements includes not only the taking of the required courses and the obtaining of the required average QPRs, but also passing with a grade of "D" or better all courses specified as academic unit degree requirements.

If a student fails a required course and is unable to repeat the course in a later term, a waiver may be granted if the concerned academic unit Chair determines that the passing of a subsequent course in a sequence or the passing of a related non-required course meets the academic unit degree requirements.

In nominating candidates for the award of degrees, Program Officers will forward to the concerned academic unit Chair transcripts for all students failing a course.

If the concerned academic unit Chair determines that a waiver may be granted for failing a required course, the Chair will write a memorandum to the Council, which will accompany the student's nomination for the degree, stating his position with respect to the failed course.

If the concerned academic unit Chair is unable to waive the failure of a required course, the Program Officer will be so informed. In this event, the Program Officer may

forward the student's appeal (as per section 219 of the Student Handbook) to the school Dean for a decision relative to the award of a degree. If the matter remains unresolved by the school Dean, the student may appeal to the Academic Issues Review Board (Provost, Vice Provost for Academic Affairs, and the Dean of Students) for a possible alternative action. The Academic Council will be informed of the action as it pertains to candidacy and graduation status.

7.5.3 Revocation of Degrees

(Approved: January 25, 2012)

NPS may initiate degree revocation procedures if misconduct, academic dishonesty, or serious administrative error is discovered after award of the degree. Revocation procedures are similar to disenrollment procedures cited in NAVPGSCOLINST 1520.2 (series), to include student notification of pending revocation and the opportunity to provide information on their behalf (normally within 30 days receipt of intent to revoke).

If administrative, the student may be given the opportunity to remedy. The School Dean or Chair initiates revocation procedures and may convene a review board to assist with recommendations to the Academic Council.

If there is clear and compelling evidence warranting revocation, the student's official transcript will be corrected to reflect any sanction(s) imposed once notification to the Academic Council is completed. Upon recommendation of the Academic Council, the President's notification to the student may include a request to return NPS documents rendered "inaccurate" as a result of this process.

7.5.4 Awarding a Degree Posthumously

(Approved April 30, 2014)

The Academic Council may nominate a student for, and the President confer, a degree posthumously. Requests for a posthumous degree may be made by family members or other interested party of the deceased student. Requests must be routed through the student's department and be endorsed by the Department Chair and Dean of the School. The Academic Council may nominate the student for a degree, if at the time of death:

1. The student was enrolled at NPS and in good standing; and
2. The Academic Council determines that recognition of the student's accomplishments by the award of a degree is warranted based on graduate work completed and other circumstances pertinent to the request.

Final approval of the request for a posthumous degree rests with the President. Upon approval by the President the student's official transcript will be annotated with the degree conferred and that the degree was awarded

posthumously. The Diploma for the degree will not include any special notation.

Should a request for a posthumous degree be disapproved, a certificate of attendance or other appropriate recognition of the student's time at NPS may be presented to the student's family.

7.6 Multiple Degree Programs within the Naval Postgraduate School

(Amended March 24, 2004) (Amended July 25, 2012) (Amended June 12, 2013)

An internal dual degree program at NPS is one in which a student begins coursework for a second master's degree before completion of his/her first degree. The dual degree program leads to the award of two distinct master's degrees and it must be approved by the Academic Council via the Special Programs Committee. A program in which the coursework for the second master's degree begins after completion of the first NPS master's degree is not considered a dual degree program.

7.6.1 Qualification for an Internal Dual Degree Program

(Amended February 19, 1997) (Amended June 12, 2013) (Amended November 16, 2016) (Amended September 15, 2021 and November 17, 2021)

Qualified students may pursue an internal dual degree program by requesting approval from the Academic Council to be admitted to the second degree. Any student not fully approved and not officially enrolled in a second degree program prior to the 12-month approval deadline is ineligible to receive the second degree.

The Program Officer and Academic Associate must certify that the applicant possesses a TQPR of at least 3.75.

The program which leads to two NPS graduate degrees must satisfy the requirements of both degrees.

A single thesis may be used to satisfy the requirements of both academic units provided it shows relevance to and mastery of both fields, is permitted by the policy of both academic units, and is coadvised by a member of each academic unit.

The dual NPS degree program must satisfy the enrollment limitations cited in this Manual. If a student requires waivers for enrollment limitations, the request for waiver must be included in the application for the special program.

7.6.2 Application for an Internal Dual Degree Program

(Amended September 20, 1995) (Amended January 17, 2007) (Amended June 12, 2013) (Amended November 16, 2016) (Amended November 17, 2021)

A student desiring admission in an internal dual NPS degree program must apply at least one year prior to their projected graduation date, but not before having completed a minimum of 12 hours of graduate course work in their assigned program. Students within one year of graduation are not eligible to apply for enrollment in internal dual degree programs.

The application endorsements must represent approval from all involved academic units:

1. Chairs;
2. Academic Associates;
3. Service Representative or International Programs Office as applicable;
4. Program Officers.

Endorsement by the academic unit Chairs will signify that the applicant meets any and all additional requirements for dual master's degrees that have been established by the respective academic units. The application must also include:

1. The approved degree requirements for each program.
2. A listing of courses and course hours for each program.
3. A single course matrix, graphically depicting all courses necessary for each degree program and showing that the program will not exceed quarterly credit hour limits per §6.5 *Course Enrollment Limitations*. Quarters where enrollment limitation waivers are requested must be highlighted.
4. Requests for enrollment waivers (if necessary).

7.6.3 Required Progress Report

(Amended January 25, 2012)

Satisfactory progress in course and thesis work must be maintained by the student in the NPS dual degree program. Deficiencies in course and/or thesis performance have to be promptly reported to the Special Programs Committee by the thesis advisor(s) or the Academic Associate.

If satisfactory progress is not maintained, the Academic Council will require that the student revert to his/her original single degree program.

7.6.4 Double Counting Courses

(Approved November 16, 1994)

A course may be used to satisfy the requirements for a master's degree and a subsequent engineer's or Ph.D. degree at NPS. In no other circumstance may a course be counted for credit for more than one degree.

7.6.5 Programs leading to Three or More Degrees

(Approved March 24, 2004)

No student may pursue more than two master's degrees at one time. If a third master's degree is to be pursued, at least one degree of a dual degree program must be completed before course work for the third degree is

begun.

7.7 Joint Degree Programs

(Approved March 21, 2012)

A joint degree program is one in which a program is offered collaboratively by NPS and another accredited institution which leads to the award of a single degree issued jointly by both institutions. Any such program must be approved by the Academic Council.

7.7.1 General Provisions for a Joint Degree

Joint degree programs are expected to be designed and operated in conformity with the Standards of Accreditation and relevant policies of each respective institution's accrediting body (WASC/ACSCU for NPS). A partnering institution within the United States must be accredited by a U.S. Department of Education-approved accrediting agency. An international partnering institution must substantially meet the standards of WASC accreditation, as determined by the Academic Council.

All joint degree programs must have a clear written agreement between NPS and the partnering institution that outlines the plan to offer, monitor, and assess the joint degree program.

Considerations for developing a joint degree program include:

- The program should be consistent with NPS and the partnering institution's mission and educational objectives.
- The degree awarded should represent a coherent course of study that is in keeping with the quality of other degree programs offered by NPS and the partnering institution.
- A near-equal or greater proportion of the course credits awarded toward the joint degree shall be earned in courses offered by NPS and taught by NPS faculty.
- Sound practices are employed for the award of credit at each institution.
- Appropriate program level, course content, and standards are established and periodically evaluated at each partnering institution.
- Appropriate student learning outcomes, expectations for student achievement, and means to assess student achievement are established.
- Sufficient and qualified faculty and staff are available to execute the agreed on instructional and administrative responsibilities at each partnering institution.
- Provisions for institutional quality assurance processes, including program review, are agreed on and applied.

The program must be approved by the faculty and administration of both institutions in keeping with their usual decision-making processes.

7.7.2 Requirements for Approval of a Joint

Degree Program

Requests for approval of a new joint degree program involving NPS and a partnering institution shall be submitted to the Academic Council in sufficient time for the Council to review and decide on the request prior to admitting any students into the joint degree program.

The request should include:

1. Identification of the NPS School and specific department or group responsible for the execution, content and quality of the curriculum.
2. The submitting department or group must provide the information required for evaluation as listed in paragraph 7.7.1, if that information is not publicly available.
3. A general description of the program and rationale for its development.
4. The name of the degree and associated degree requirements.
5. A detailed listing of the required courses in the program, to include which institution will be responsible for delivering each, course descriptions, and current status (existing, approved, or under development).
6. A final negotiated draft of the detailed Memorandum of Agreement (MOA) between NPS and the partnering institution that fully describes all aspects of the collaborative relationship. While the Academic Council is primarily interested in academic rigor, content, and quality of the joint degree program, the MOA should cover the following matters, as a minimum.
   a. Administrative issues such as: student admission; advising and other student services; record keeping; information resources, technology and facilities.
   b. Program quality and content issues such as: maintenance of sufficient and qualified faculty and staff; application of quality assurance processes; scheduled joint program reviews.
   c. Planning and budgeting issues such as: tuition; cost transfers, cost sharing.

A joint degree program will not be considered fully approved for delivery or award of the degree until both the NPS Academic Council and the partnering institution's equivalent entity have approved the program and the detailed MOA for the program has been signed by the appropriate representatives from each institution.

7.7.3 Reporting and Reviewing Requirements for a Joint Degree Program

Any joint degree program is subject to the same review and reporting requirements as any other NPS degree. This includes notification requirements and requests for approval of substantive changes as outlined in Chapter 8 of this Policy Manual. Additionally, because of the unique relationship and trust required between partnering

institutions in the execution of a joint degree program, the Academic Council shall be notified of the results of any joint program reviews concerning academic rigor, content or quality biennially.

7.8 Dual Degree Programs with Partnering Institutions

(Approved August 21, 2013)

A dual degree program with partnering institutions is defined as a program of study offered collaboratively by two institutions that leads to the award of a separate degree from each of the participating institutions. Any such program must be approved by the Academic Council. This section does not apply to programs of study in which two entities (e.g., schools, colleges, departments) within NPS offer two distinct degrees. Those programs are addressed in section 7.6 (p. 27) of this policy manual.

7.8.1 General Provisions for a Dual Degree with a Partnering Institution

Dual degree programs are expected to be designed and operated in conformity with the Standards of Accreditation and relevant policies of each respective institution's accrediting body (WASC/ACSCU for NPS). A partnering institution within the United States must be accredited by a U.S. Department of Education-approved accrediting agency. An international partnering institution must substantially meet the standards of WASC accreditation, as determined by the Academic Council. Dual degrees will not be awarded for substantially the same body of work. NPS will not offer a dual degree program with a partnering institution for which the student is awarded two degrees of the same name for completion of what would normally be the course of study for one degree (e.g., a Master of Business Administration from NPS and a second MBA from another institution for the same set of 30 to 36 semester units that would normally lead to a single MBA). An approved dual degree program may result in awarding two degrees with the same name provided that the degree program complies with the provisions of this policy and the WASC/ACSCU Standards of Accreditation, that the degree program is sufficiently extensive and unique in design, and that it exceeds the amount of academic work typically required for a single degree at either institution.

All dual degree programs must have a clear written agreement between NPS and the partnering institution that outlines the plan to offer, monitor, and assess the dual degree program. That agreement must be submitted to the AC for review, as a part of the approval process.

Considerations for developing a dual degree program which should be addressed in such written agreements include:

- Which courses, if any, will be counted towards both degrees. In no case will the total number of double counted and transferred course credits exceed 25% of the required course credits for the degree received from either institution.
- The program should be consistent with NPS and the partnering institution's mission and educational objectives.
- The degree awarded should represent a coherent course of study that is in keeping with the quality of other degree programs offered by NPS and the partnering institution. Sound practices are employed for the award of credit at each institution.
- Appropriate program level, course content, and standards are established and periodically evaluated at each partnering institution.
- Appropriate student learning outcomes, expectations for student achievement, and means to assess student achievement are established.
- Sufficient and qualified faculty and staff are available to execute the agreed on instructional and administrative responsibilities at each partnering institution.
- Provisions for institutional quality assurance processes, including program review, are applied.

7.8.2 Requirements for Approval of a Dual Degree Program with a Partnering Institution

Requests for approval of a new dual degree program involving NPS and a partnering institution shall be submitted to the Academic Council in sufficient time for the Council to review and decide on the request prior to admitting any students into the dual degree program.

The request should include:

1. Identification of the NPS School and specific department or group responsible for the execution, content and quality of the NPS degree in the dual degree program.
2. The submitting department or group must provide the information required for evaluation as listed in paragraph 7.8.1, if that information is not publicly available.
3. A general description of the program and rationale for its development.
4. The name of the degrees associated with each institution and associated degree requirements.
5. A detailed listing of the required courses in the program, to include which institution will be responsible for delivering each, course descriptions, and current status (existing, approved, or under development).
6. A final negotiated draft of the detailed Memorandum of Agreement (MOA) between NPS and the partnering institution that fully describes all aspects of the collaborative relationship. While the Academic Council is primarily interested in academic rigor, content, and quality of the degrees in a dual degree program, the MOA should cover the following matters, as a

minimum.

   a. Administrative issues such as: student admission; advising and other student services; record keeping; information resources, technology and facilities.

   b. Program quality and content issues such as: maintenance of sufficient and qualified faculty and staff at each institution; application of quality assurance processes; scheduled joint program reviews.

   c. Planning and budgeting issues such as: tuition; cost transfers, cost sharing, if appropriate.

A dual degree program will not be considered fully approved for delivery or award of the degrees until both the NPS Academic Council and the partnering institution's equivalent entity have approved the program and the detailed MOA for the program has been signed by the appropriate representatives from each institution.

7.8.3 Reporting and Reviewing Requirements of a Dual Degree Program with a Partnering Institution

Any dual degree program is subject to the same review and reporting requirements as any other NPS degree. This includes notification requirements and requests for approval of substantive changes as outlined in Chapter 8 of this Policy Manual. Additionally, because of the unique relationship and trust required between partnering institutions in the execution of a dual degree program, the Academic Council shall be notified of the results of any joint program reviews concerning academic rigor, content or quality.

7.8.4 Required Notation on Student Records of Dual Degrees with Partnering Institutions

Transcripts and diplomas shall indicate that the program in which the student was enrolled is a dual degree program. Transcripts shall indicate which courses were completed at the partnering institution.

Chapter 8: Modifying the NPS Curriculum

8.1 Adding and Modifying Courses in the Course Catalog

(Approved May 17, 1995) (Amended January 22, 2007) (Amended January 25, 2012) (Amended April 24, 2013) (Amended April 30, 2014)

8.1.1 Adding a Course

Before offering a new course, the course must be approved by the Academic Council. A request for approval must be made to the Academic Council Course Review Committee at least four months in advance of its intended initial offering. The course must be fully developed and ready for initial offering to students prior to submission for approval. The request must be submitted in the format specified in the course request form available from the Academic Council Recording Secretary.

All requests for adding a new course or changing the NPS Course Catalog description of an existing course must be addressed as shown below:

From: _____Chair, Academic unit of _____

Via: _____Dean, School of_____
Via: Vice Provost for Academic Affairs
Via: Academic Council Recording Secretary
To: Chair, Course Review Committee
Copy: Office of Academic Administration, all academic units, Program Officers, and Deans

If a course is to be cross-listed by multiple academic units, then the approval chain must include the academic unit Chairs and Deans of all affected academic units.

If any Academic unit objects to a course addition by another academic unit, they should inform the Chair of the academic unit proposing to offer the course and the Chair of the Course Review Committee. This objection must be made prior to the Academic Council meeting at which the course will be addressed.

A valid request must contain all of the following information:

1. Catalog description, including the following:
   a. Course Number, title and credit hours;
   b. Curricula served (if enrollment is restricted);
   c. Course description (must highlight DoD/DoN relevance, if any);
   d. Time period of instruction and hours per week if the course is to be offered in an accelerated mode, i.e., accomplished in any period less than 10 weeks;
   e. Prerequisites and co-requisites;
   f. Security Classification, if any;
   g. Pass/Fail status, if applicable

2. Statement of course learning outcomes. Program reviews evaluate how well courses address stated program objectives. This is typically accomplished by considering the match between the course learning outcomes and program learning objectives and how those learning outcomes are assessed. Four questions should be answered:
   a. **What are the program learning objectives?** Program learning objectives typically include Educational Skill Requirements set by the curriculum sponsor as well as discipline requirements established by the academic department and external accreditation organizations. That is, they represent topics the students are expected to understand or skills they are expected to be able to exercise, at a relatively high level of generality.
   b. **What are the course learning outcomes?** A typical program objective will generate multiple learning outcomes. Course learning outcomes are specific knowledge items, logical activities, or specialized skills each student will be expected to demonstrate as a result of successful completion of the course.
   c. **How do the course learning outcomes align with the program learning objectives?** Course learning outcomes should address specific program learning objectives. Multiple program learning objectives may be satisfied by each course. A discussion of which outcomes map to which objectives is required.
   d. **What are the measures for assessing the course learning outcomes?** Each learning outcome must be assessed. Measures of performance as well as the use of direct and indirect assessments specific to course learning outcomes must be described. Performance standards and/or rubrics should clearly define how each course learning outcome will be demonstrated by each student taking the course.

3. Course Syllabus. The Academic Council will review the course syllabus to evaluate the depth and breadth of topical content of the proposed course, the level of the material covered and expected level of student performance, the amount of time devoted to each topic, the objectives of the course, how those objectives will be measured, and the state of development of the course. The syllabus must be sufficiently complete and explicit for both Academic Council and outside accreditation review. At a minimum, the syllabus must contain:
   • A detailed list of modules and/or topics covered during the lectures and the approximate number of

lecture hours spent on each topic.

- A detailed list and brief descriptions of experiments, projects, or activities (if laboratory hours are requested for the course.)
- A list of proposed teaching material, e.g., textbooks, outside reading, and/or published handouts.

These items are discussed in more details below. The syllabus must be consistent with the mode of delivery for which approval is requested. Although details are required for initial approval, minor alterations to the syllabus made after Academic Council approval do not require reapproval, unless such alterations lead to a substantive change in the character or content of the course.

Detailed list of modules and/or topics covered during lectures and the number of lecture hours spent on each topic. This list should be organized by the planned order of presentation or occurrence. At a minimum the topical decomposition must be sufficiently detailed that no topic spans more than one week of lectures. A daily breakdown of topics is preferred. Timing, type, and topical coverage of formative and summative assessment activities (homework, quizzes, examinations, presentations, papers, reports, etc.) should be included in this list.

Detailed list and brief descriptions of experiments, projects, or activities. If laboratory hours are requested for a course a list must be provided that identifies all activities (experiments, problem solving sessions, computer-based activities, work on team projects, etc.) to be performed during each weekly laboratory session. This list may be incorporated into the list of lecture topics, if desired. If necessary equipment and facilities are not initially available to support all laboratory sessions, state which experiments will be delayed until later offerings of the course and what alternate activities will be substituted to utilize the laboratory hours requested. Special provisions necessary for non-resident modes of delivery of labs or projects should be discussed in detail.

4. Justification. This is to be a free-form discussion on the rationale for adding a new course or changing an existing one. This must include:
   a. Whether the course is required to satisfy a degree requirement or Educational Skill Requirement, or is an elective. The requirement satisfied should be listed.
   b. Whether the course is a prerequisite, co-requisite (and the courses to which it is prerequisite/co-requisite) or a terminal course.
   c. Justification for the level of classification of the course.
5. Duplication. A list of courses covering similar topics or significant subsets of the topics must be provided. An analysis of why these courses cannot adequately meet academic objectives must be included. If no existing course at NPS covers a similar set or significant subset of topics, a no-duplication statement must be included. If duplication is likely to be contested by other academic units, then this should be negotiated between the contesting parties before the course is submitted to the Course Review Committee, and evidence of the favorable outcome of such negotiation should be part of the submission package.
6. Resources. A statement indicating whether a new or revised course will require a non-negligible increase in resources either within or outside of the academic unit, such as a new instructor, new laboratory space, or new laboratory equipment, should be attached.
7. Schedule. Indicate the proposed schedule for the course (e.g. Every Spring, starting in 2014).

8.1.2 Modifying an Existing Course

(Amended May 19, 2021)

Modification to an existing course requires approval of the Course Review Committee. With the exception of minor modifications, as described below, the procedure for requesting a modification is similar to 8.1.1 above. The course syllabus is not required unless specifically requested by the Course Review Committee.

The Academic Council delegates to the Office of Academic Administration authority to make minor modifications such as changing quarters offered, changing security clearance, correction of spelling, typographical, or grammatical errors.

Course modification may include a request to cross-list a course in question with another existing course offered by another department – in this case, the justification should include rationale for doing this and a mechanism to ensure that cross-listed courses offer the same content in the future (e.g., establishing an interdepartmental committee). In the case of a course cross-listing request, the approval chain must include the academic unit Chairs and Deans of all affected academic units.

8.2 Removing a Course from the Catalog

(Approved May 17, 1995) (Amended January 17, 2007) (Amended January 22, 2007) (Amended January 25, 2012)

A proposal to remove or retire a course from the Catalog must first be circulated to all academic units and curricular offices. All requests for retiring a course must be addressed as shown below:

From: _____Chair, Department of _____

Via: _____Dean, School of_____

Via: Vice Provost for Academic Affairs

Via: Academic Council Recording Secretary

To: Chair, Course Review Committee
Copy: Office of Academic Administration, all academic units, Program Officers, and Deans

with a justification for the proposed action and a statement that the retirement will not adversely affect any curriculum or program at NPS. If any Chair or Program Officer objects to the removal, they must inform both the Chair of the affected academic unit (who is responsible for informing that academic unit's Academic Council representative) and the Chair of the Course Review Committee.

8.3 Restoring a Retired Course to the Course Catalog

(Approved January 25, 2012)

Upon request from an academic unit Chair and approval of the Dean of the appropriate school, the Office of Academic Administration is authorized to restore a retired course to the active Course Catalog provided no modifications are made to the original course description. If modifications are desired, then a request to un-retire the course must be submitted to the Academic Council in conjunction with the change request as specified in 8.1.2 (p. 32).

8.4 Changing or Adding Master's Degree Programs

(Approved May 17, 1995) (Modified: October 25, 1995) (January 25, 2012) (March 18, 2020)

Academic units have the right to modify their degree programs at any time, but must notify the Council of any changes via memo to the Secretary. Changes in degree programs must be submitted for approval by the Council if the proposed change:

1. requires a waiver of rules or procedures of this Manual to effect the change; or
2. the degree program is new; or
3. the change is the result of a major change in emphasis; or
4. results in a significant reduction in degree requirements.

New degree programs must be submitted and approved prior to admitting students to the new degree program.

The application for the new degree program must contain:

1. proposed name of the degree;
2. a list of the admission requirements and required APC;
3. the length of the program and whether it is resident, distance learning, or both;
4. a list of program learning outcomes and/or education skills requirements;
5. a list of required courses and sample matrices;
6. evidence of the review of the program by the Deans,

Chairs & Directors via the New Program Review process;

7. a general description for the NPS Course Catalog.

8.5 Adding Ph.D. Programs

(Approved May 17, 1995)

Any academic unit at the Naval Postgraduate School wishing to offer a Ph.D. program must meet the following criteria:

1. The academic unit must have an active master's degree program in the field of the proposed Ph.D. program.
2. There must be adequate physical facilities, such as laboratories, and equipment, for research in the field of study. There must also be adequate library facilities accessible to support research in the field.
3. The faculty of the academic unit must be diverse enough to give such a program.
4. A reasonable number of the faculty must hold the doctorate and be currently active in research as evidenced by publications in the open literature.
5. The academic unit must have two or more qualified faculty members in each subfield where it is proposed to award the doctorate.
6. The academic unit must contain faculty members who have had experience, at NPS or elsewhere, in serving on doctoral committees or otherwise been involved in supervising doctoral programs.

An academic unit wishing to offer a Ph.D. program must submit a document to the Academic Council giving evidence that the above criteria have been met. Furthermore, the academic unit must specify exactly those subfields in the general discipline in which it plans to award the degree, and it supply a list of academic unit faculty members who are qualified to serve on dissertation committees for each subfield.

If an academic unit wishes to add a new subfield to an existing Ph.D. program, the academic unit will apply to the Academic Council and supply evidence that it has sufficient depth in the subfield. Such evidence must include a list of faculty members in the subfield and a list of courses it anticipates offering in the subfield.

If the Academic Council determines that an academic unit no longer meets the criteria for a Ph.D. program, the Academic Council has the right to rescind an academic unit's privilege of offering a Ph.D. program.

Two or more academic units who wish to offer a joint doctoral program must follow the procedures outlined above.

Chapter 9: Academic Certificates

(Approved 27 October 2004)

9.1 Definition

An academic certificate is defined as a coherent sequence of courses that is sufficient to master a well-defined body of knowledge or technical expertise at a level beyond the baccalaureate.

9.2 Authority

The Academic Council shall exercise approval authority for academic certificates.

An academic certificate may be issued only by the Registrar and shall be recorded on the NPS transcript. Academic certificates are the only certificates to be recorded on the NPS transcript.

9.3 Criteria

(Amended June 11, 2014)

An academic certificate must include at least 12 credit hours of work, 9 of which must be at the graduate level, and all of which must be NPS courses.

Courses in an academic certificate may be applied to a degree at NPS; there is no bar on 'double counting' for degree purposes. Courses may not be double counted for multiple certificates.

To be admitted to an academic certificate program, prospective students must meet the master's admissions requirements for NPS outlined in section 4.2 of this manual and any prerequisites for the courses in the certificate program. An academic certificate program must be completed within 3 years of admission to the program.

To be awarded an academic certificate, a student must maintain:

1. a 3.0 or higher GQPR;
2. a 2.75 or higher CQPR.

9.4 Proposal Procedures

Proposals for new academic certificate programs must include a list of required courses and rationale for offering the certificate. Proposals must be submitted to the Academic Council six months in advance of the anticipated date of first student's completion of the new certificate program.

Proposals for new academic certificate programs shall describe how the program accords with recognized standards and best practices (for example, the "Good Practices for Electronically Offered Degree and Certificate Program" promulgated by the regional accreditation commissions). In particular,

1. A proposed academic certificate shall describe the learning outcomes for the certificate, and the manner in which the outcomes constitute a coherent and self-contained body of knowledge.
2. A proposal for an electronically offered academic certificate shall include an evaluation strategy for sustained, evidence-based and participatory inquiry to assess whether the program is achieving its objectives and for continual improvement. The strategy shall include provisions for:
   a. Documented assessment of student achievement by comparing student performance to intended learning outcomes,
   b. Measures to determine overall program effectiveness,
   c. Evaluation in the context of the regular evaluation of all academic programs.

Proposals for an academic certificate must be endorsed by the appropriate academic unit chairs and deans for appropriate content and for supportability, especially with respect to funds, space and facilities, and faculty availability.

Appendix A. Glossary

In this Manual, the following definitions are in force:

1. APPROVAL

    Unless otherwise stated, approval is by majority vote.

2. ENROLLMENT LIMITATION

    A limit placed on the number of hours a student may enroll in during a quarter.

3. ACADEMIC UNIT

    Any academic activity having cognizance of degree requirements.

4. QUORUM

    A quorum is defined as two-thirds of the Council or Standing Committee.

Appendix B. References

The 2013 Naval Postgraduate School Course Catalog. Director of Academic Administration, Naval Postgraduate School, Monterey, California.

Robert, H. M. 1970. Robert's Rules of Order: Newly Revised. Glenview, Illinois: Scott, Foresman and Company.

Revision History

October 27, 2004: Academic Certificate Programs Adopted, Section 9 added, modifications made to 1.0, 2.1, and 2.54.

December 15, 2004: Modifications made to Ph.D. procedures, Section 5.4 amended.

December 15, 2005: Manual brought up to date through October 2005 Minutes.

December 19, 2008: Various administrative changes per November 2008 Minutes.

January 25, 2012: Comprehensive Manual Revision affecting all sections, adopted by the Academic Council. Removed Appendices titled *Degree Requirements and List of NPS Curricula.* (Items are kept current in the Course Catalog quarter by quarter.)

March 21, 2012: Joint Degree Programs adopted, Section 7.7 added.

May 16, 2012: Course Credit Hour Policy adopted, Section 6.1.3 added. Modifications made to Section 8.1.1, titled *Adding a Course.*

July 25, 2012: Modifications made to Section 7.1, *Multiple Degree Programs.*

April 24, 2013: Administrative changes made to Section 8.1.2, *Modifying an Existing Courses.*

May 15, 2013: Administrative changes made to Sections 4.1, and 5.1 regarding Bachelor degrees.

June 12, 2013: Administrative changes made to Section 7.6, *Multiple Degree Programs within the Naval Postgraduate School.*

August 21, 2013: Substantive changes made to Sections 5.2 and 6.6.3 regarding Incomplete Degrees: Thesis Extensions credit from another institution. *Dual Degree Programs with Partnering Institutions* adopted, Section 7.8. Administrative changes made to Sections 3.1.4, 5.4.1, 5.4.16, 5.4.19, Appendix C, and 7.5.1.

October 30, 2013: Administrative changes made to Section 5.4.3, *Selection of Dissertation Supervisor, Dissertation Committee, and Dissertation Topic.*

April 30, 2014: Policy on *Awarding a Degree Posthumously* adopted, Section 7.5.5. Administrative change made to Section 8.1.1, *Adding a Course.*

June 11, 2014: Administrative changes made to Section 5.2.1, *Thesis or Capstone Project Advisor Qualifications,* and to Section 9.3, *Criteria.*

November 18, 2020: Administrative changes made to Section 5.4.5, *Responsibilities and Qualifications of the Dissertation Committee*.

January 27, 2021: Outstanding Thesis Award policy adopted, Section 7.3.2.

May 19, 2021: Administrative changes made to Section 8.1.2 *Modifying an Existing Course*.

June 9, 2021: Substantive changes made to Section 5.2.3., *Time Limits for Completing the Master's Degree*. New policy adopted: Section 5.2.4, *Advancement to Master's Candidacy*, 5.2.5, and 5.2.6. Council revised and renumbered/retitled section 7.5.1 to be 5.2.6, *Restoring a Lapsed Master's Candidacy*. Sections 7.5.2 - 7.5.5 were renumbered to account for the removal of 7.5.1. formerly titled - *Incomplete Degrees: Thesis Extensions*.

August 18, 2021: Administrative change made to Section 3.1.2. *Curriculum, Certificate, and Degree Requirements Committee*.

September 15, 2021: Administrative changes made to Section 3.1.3., 5.4.1., and Appendix C regarding approval of Ph.D. Dissertation Committees. Administrative changes made to section 6.6.3. regarding transferring credit from an outside institution (item #4 [D] was added to the section).

November 17, 2021: Substantive changes made to Section 7.6.1. *Qualification for an Internal Degree Program*. Council removed class percentage rules and performance ranking requirements. Council also removed a dual degree enrollment item from Section 7.6.2. that required the Registrar to calculate the TQPR.

Appendix C. Summary of Milestones for Ph.D. Degrees

Written Qualifying Exam: The departmental Ph.D. committee notifies AC that student has passed the written qualifying exam. This memo is from the Chair of the departmental Ph.D. committee.

Oral Qualifying Exam: The departmental Ph.D. committee notifies the AC that the student has passed the oral qualifying exam. This memo is from the Chair of the departmental Ph.D. committee and includes the signatures of the examining committee. Also required is a separate memo (typically via e-mail) from the Academic Council representative that the oral exam that it was conducted in accord with Academic Council guidelines.

Approval of Dissertation Committee: The departmental Ph.D. committee notifies the Registrar of the student's dissertation committee. This memo is from the departmental Ph.D. Committee Chair and includes the name, academic unit, and degree qualifications for each member of the dissertation committee.

Advancement to Candidacy:
After the oral qualifying exam has been passed and a dissertation committee selected and approved, the departmental Ph.D. Committee Chair requests advancement to candidacy for the student once the dissertation committee has approved the topic. From this point forward, the dissertation committee is responsible for key milestones.

Passage of Dissertation Defense: The dissertation committee notifies the AC when the student has passed the dissertation defense. Also required is a separate (typically via e-mail) memo from the Academic Council representative that the exam was conducted in accordance with AC policy.

Recommendation for Degree: When the dissertation has been successfully defended and the dissertation approval and release form has been signed by each member of the dissertation committee, the Chair of the academic unit and the Vice Provost for Academic Affairs, and the student's dissertation has been accepted "final" by the Thesis Processing Office, the Chair of the dissertation committee submits a memo recommending the student to the Academic Council for nomination. A copy of the signed dissertation approval and release form and a copy of the final acceptance notification email from the Thesis Processing Office must be included with the nomination memo.

Nomination for Degree: The Academic Council will make the final decision whether or not to recommend the candidate to the President of the Naval Postgraduate School for the award of the Doctor of Philosophy degree.

Appendix D. Degree Requirements

(Updated November 23, 2021)

Master's Degrees

Master of Business Administration

1. Completion of all required courses in the MBA core.
2. Completion of an approved sequence of courses in a concentration area with a minimum of 24 graduate-level credit hours.
3. Completion (excluding by validation) of a minimum of 58 credit hours of graduate-level courses, at least 22 of which are at the 4000 level.
4. Completion of an acceptable application project or thesis.
5. Approval of the candidate's program by the Chair, Department of Defense Management (DDM).

Master of Arts in Management

1. Completion (excluding by validation) of a minimum of 44 credit hours of graduate-level GB/MN courses, at least 18 of which are at the 4000 level (Credit hours required for the degree project do not count toward the 44 credit hour minimum requirement.),
2. Completion of the core MBA management, ethics, acquisition, economics, and quantitative GB/MN courses,
3. Completion of an approved sequence of financial management courses totaling at least 14 credit hours,
4. Completion of an acceptable application project or thesis.
5. Approval of the candidate's program by the Chair, DDM.

Master of Science in Management

1. Completion of a minimum of 48 hours of graduate-level courses, at least 12 hours of which are at the 4000 level.
2. Completion or validation of the Management Fundamentals program, which consists of a total of 32 quarter-hours of 2000 and 3000 level courses, including a minimum of the following hours by discipline:
3. Accounting and Financial Management (6) Economics (6)
4. Organization and Management (6)
5. Quantitative Methods (8)
6. Completion of an approved sequence of courses in the student's area of concentration.
7. Completion of an acceptable thesis.
8. Approval of the candidate's program by the Chair, DDM.

Executive Master of Business Administration

1. Completing 39 hours of core EMBA courses, including Capstone Project courses, and 17 hours of an approved sequence of DM electives;
2. The 17 hours of approved electives can be tailored to meet student sponsor needs; and
3. Remaining a student in "good academic standing" as defined by NPS criteria.

Master of Science in Contract Management

1. Completion of a minimum of 48 credit hours of graduate-level courses, at least 12 that are at the 4000 level. (Credit hour requirement does not include 4 hours assigned for the Joint Applied Project.)
2. Completion of an acceptable Joint 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.

Master of Science in Program Management degree requires:

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 joint 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.

Professional Master of Business Administration

1. Completion (excluding capstone courses) of a minimum of nine DDM courses:
   a. At least one MBA core course from each of the DDM areas (ACQ, FM, OLM, MPE, MGT)
   b. Four additional courses from any DDM area
   c. DDM courses must make up at least 50% of the degree program.
2. Enrollment in no more than four courses in any DDM subspecialty sequence.
3. Completion (excluding by validation) of a minimum of 48 credit hours of graduate-level courses, at least 16 of which are at the 4000 level.
4. Completion of an acceptable project or thesis.

Master of Science in Applied Mathematics

1. A minimum of 32 quarter-hours of graduate-level (3000-4000 numbered) courses with a minimum QPR of 3.0. The program specifications must be approved by the Chairman of the Department of Applied Mathematics and the Academic Associate.
2. A student must complete or validate the four 1000 level calculus sequence and the introductory courses in linear algebra and discrete mathematics.
3. The program must include at least 16 hours in 3000 level mathematics courses and 16 hours of approved 4000 level mathematics courses.

4. Courses in Ordinary Differential Equations, Real Analysis, and upper division Discrete Mathematics are specifically required, and those at the 3000 level or above may be applied toward requirement (2).

5. An acceptable thesis is required. The Department of Applied Mathematics permits any student pursuing a dual degree to write a single thesis meeting the requirements of both departments, subject to the approval of the Chairmen and Academic Associates of both departments.

Master of Science in Electrical Engineering

1. A minimum of 52 credit hours of graduate level work.

2. There must be a minimum of 36 credits in the course sequence 3000-4999, of which at least 30 credits must be in Electrical and Computer Engineering. The remainder of these 36 credits must be in engineering, mathematics, physical science, and/or computer science.

3. Specific courses may be required by the department and at least four courses that total a minimum of 12 credits, must be in the course sequence 4000-4999.

4. An acceptable thesis for a minimum of 16 credits must be presented to, and approved by, the department.

Master of Science Engineering Science (Electrical Engineering)

1. A student needs a minimum of 52 credit hours of graduate-level work.

2. There must be a minimum of 36 credits in the course sequence 3000-4999, of which at least 30 credits must be in Electrical and Computer Engineering. The remainder of these 36 credits must be in engineering, mathematics, physical science, and/or computer science.

3. Specific courses may be required by the department and at least four courses that total a minimum of 12 credits, must be in the course sequence 4000-4999.

4. An acceptable thesis for a minimum of 16 credits must be presented to, and approved by, the department.

Master of Science Engineering Science (Computer Engineering)

1. A minimum of 52 credit hours of graduate-level work.

2. There must be a minimum of 36 credits in the course sequence 3000-4999, of which at least 24 credits must be in Electrical and Computer Engineering, Computer Science, or Software Engineering.

3. Specific courses are required by the department, and at least four courses that total a minimum of 12 credits must be in the course sequence 4000-4999.

4. An acceptable thesis for a minimum of 16 credits must be presented to, and approved by, the department.

Master of Engineering (Computer Engineering)

1. The Master of Engineering (Computer Engineering) is a course-based degree program for non-resident students enrolled in distance learning programs.

Specific courses are required by the department.

2. Students must complete a minimum of 36 credit hours of graduate level course work which includes a minimum of four courses and 12 credit hours of 4000 level course work where at least three of the four 4000-level courses must be graded.

3. MEng (CE) degree programs must contain a minimum of eight courses in Electrical and Computer Engineering, Computer Science, or Software Engineering.

4. This degree program is quite flexible and can be designed with a focus tailored to meet distance learning customer requirements for work-force development.

Master of Engineering (Electrical Engineering)

1. The Master of Engineering (Electrical Engineering) is a course-based degree program for non-resident students enrolled in distance learning programs.

2. Students must complete a minimum of 32 credit hours of graduate level course work which includes a minimum of three courses and 10 credit hours of 4000 level course work.

3. MEng (EE) degree programs must contain a minimum of 5 courses in electrical and computer engineering.

4. This degree program is quite flexible and can be designed with a focus tailored to meet distance learning customer requirements for work-force development.

Electrical Engineer degree requires:

1. The EE degree program requires more course work and a more comprehensive thesis than a master's degree program but does not require the seminal research demanded in a Ph.D. program.

2. A minimum of 96 total graduate credits is required for the award of the engineer's degree, of which at least 24 must be in accepted thesis research, and at least 54 credits must be in Electrical and Computer Engineering courses.

3. At least 36 of the total hours are to be in courses in the sequence 4000-4999.

4. Approval of all programs must be obtained from the Chairman, Department of Electrical and Computer Engineering.

Master of Science in Engineering Acoustics

1. A minimum of 32 graduate credit quarter-hours of course work of which at least 20 must be taken in acoustics and its applications.

2. At least three 4000 level courses from any three of the following six areas: wave propagation; transducer theory and design; noise, shock, and vibration control; sonar systems; signal processing; and communications. These courses must include at least one from each of the sponsoring disciplines (physics and electrical engineering).

3. Completion of an acceptable thesis on a topic approved

by the Engineering Acoustics Academic Committee.

Master of Engineering Acoustics

1. A minimum of 32 graduate credit quarter-hours of course work of which at least 20 must be taken in acoustics and its applications.
2. 2t least three 4000 level courses from any three of the following six areas: wave propagation; transducer theory and design; noise, shock, and vibration control; sonar systems; signal processing; and communications. These courses must include at least one from each of the sponsoring disciplines (physics and electrical engineering).
3. An acceptable one-quarter capstone project advised by a member of the Electrical and Computer Engineering or Physics Departments.

Master of Science in Mechanical Engineering

1. A minimum of 48 quarter-hours of graduate level work.
2. The candidate must take all courses in an approved study program, which must satisfy the following requirements:
3. There must be a minimum of 32 quarter-hours of credits in 3000 and 4000 level courses, including a minimum of 12 quarter-hours at the 4000 level.
4. Of the 32 quarter-hours at least 24 quarter-hours must be in courses offered by the MAE Department.
5. A student seeking the Master of Science degree in Mechanical Engineering must also demonstrate competence at the advanced level in at least one of the available disciplines of
6. Mechanical Engineering. These disciplines are the thermal-fluid sciences; solid mechanics, shock and vibration; dynamic systems and control; system design; and materials science. This may be accomplished by completing at least eight quarter-hours of the 4000 level credits by courses within one discipline, and a thesis in the same discipline.
7. An acceptable thesis for a minimum of 16 credits is also required for the Master of Science degree in Mechanical Engineering. An acceptable thesis for the degree of Mechanical Engineer may also meet the thesis requirement of the Master of Science in Mechanical Engineering degree.
8. The student's thesis advisor, the Academic Associate, the Program Officer and the Department Chairman must approve the study program and the thesis topic.

Master of Science in Astronautical Engineering

1. A minimum of 48 quarter-hours of graduate level work. The candidate must take all courses in an approved study program, which must satisfy the following requirements:
2. There must be a minimum of 32 quarter-hours of credits in 3000 and 4000 level courses, including a minimum of 12 quarter-hours at the 4000 level.
3. Of the 32 quarter-hours, at least 24 quarter-hours must

be in courses offered by the MAE Department.
4. A student must demonstrate knowledge of orbital mechanics, attitude determination, guidance and control, telecommunications, space structures, spacecraft rocket propulsion, space power, spacecraft thermal control, and spacecraft design and testing.
5. The student must also demonstrate competence at the advanced level in one of the above disciplines of Astronautical Engineering. This may be accomplished by completing at least eight quarter-hours of the 4000 level credits by courses in this Department in a particular area and a thesis in the same discipline area. The typical specialization track is in Structures, Dynamics, and Control, and requires two (2) non-design AE48XX courses.
6. An acceptable thesis for a minimum of 16 credits is also required. The student's thesis advisor, the Academic Associate, the Program Officer, and the Department Chairman must approve the study program and the Thesis Proposal.

Master of Science in Engineering Science (Mechanical Engineering)

1. A minimum of 48 quarter-hours of graduate level work. The candidate must take all courses in an approved study program, which must satisfy the following requirements:
2. There must be a minimum of 32 quarter-hours of credits in 3000 and 4000 level courses, including a minimum of 12 quarter-hours at the 4000 level.
3. Of the 32 quarter-hours, at least 24 quarter-hours must be in courses offered by the MAE Department.
4. A student seeking the Master of Science in Engineering Science degree must also demonstrate competence at the advanced level in at least one of the available disciplines of Mechanical Engineering. These disciplines are the thermal-fluid sciences; solid mechanics, shock and vibration; dynamic systems and control; system design; and materials science. This may be accomplished by completing at least eight quarter-hours of the 4000 level credits by courses within one discipline, and a thesis in this same discipline.
5. An acceptable thesis for a minimum of 16 credits is also required for the Master of Science in Engineering Science (with major in Mechanical Engineering) degree. The student's thesis advisor, the Academic Associate, the Program Officer, and the Department Chairman must approve the study program and the thesis topic.

Master of Science in Engineering Science (Astronautical Engineering)

1. A minimum of 48 quarter-hours of graduate level work. The candidate must take all courses in an approved study program, which must satisfy the following requirements:
2. There must be a minimum of 32 quarter-hours of credits in 3000 and 4000 level courses, including a

minimum of 12 quarter-hours at the 4000 level.

3. Of the 32 quarter-hours, at least 24 quarter-hours must be in courses offered by the MAE Department.

4. An acceptable thesis for a minimum of 16 credits is also required. The student's thesis advisor, the Academic Associate, the Program Officer, and the Department Chairman must approve the study program and the Thesis Proposal.

Mechanical Engineer

1. At least 64 quarter-hours of graduate level credits in Mechanical Engineering and Materials Science, at least 32 of which must be at the 4000 level.

2. At least 12 quarter-hours of graduate level credits must be earned outside of the MAE Department.

3. At least one advanced mathematics course should be included in these 12 quarter-hours.

4. An acceptable thesis of 28 credit hours is required for the Mechanical Engineer Degree. Approval of the thesis advisor and program must be obtained from the Chairman of the MAE Department.

Astronautical Engineer

1. At least 64 quarter-hours of graduate level credits in Astronautical Engineering or Mechanical Engineering and Materials Science, at least 32 of which must be at the 4000 level.

2. At least 12 quarter-hours of graduate level credits must be earned outside of the MAE Department.

3. At least one advanced mathematics course should normally be included in these 12 quarter-hours.

4. An acceptable thesis of 28 credit hours is required for the Astronautical Engineer Degree. Approval of the thesis advisor and program must be obtained from the Chairman of the MAE Department.

Aeronautical Engineer

Degree no longer awarded by MAE.

Master of Science in Engineering Science (Major in Aerospace Engineering)

1. A minimum of 48 quarter-hours of graduate level work. The candidate must take all courses in an approved study program, which must satisfy the following requirements:

2. There must be a minimum of 32 quarter-hours of credits in 3000 and 4000 level courses, including a minimum of 12 quarter-hours at the 4000 level.

3. Of the 32 quarter-hours, at least 24 quarter-hours must be in courses offered by the MAE Department.

4. A student must demonstrate knowledge of aerodynamics, aircraft stability and control, avionics, aircraft structures, aircraft and missile propulsion.

5. The student must also demonstrate competence at the advanced level in one of the above disciplines of Aeronautical Engineering. This may be accomplished by completing at least eight quarter-hours of the 4000

level credits by courses in this department and a thesis in the same discipline area. The typical specialization track is in Aircraft Structures, Aerodynamics, Stability and Control, Avionics or Propulsion.

6. An acceptable thesis for a minimum of 16 credits is also required. The student's thesis advisor, the Academic Associate, the Program Officer, and the Department Chairman must approve the study program and the Thesis Proposal.

Master of Science in Meteorology

1. Necessary prerequisite courses in mathematics (through partial differential equations) and meteorology,

2. The sequence of core courses in the fields of dynamical, numerical, physical and synoptic meteorology,

3. An approved selection of graduate elective courses,

4. An acceptable thesis.

5. The total number of quarter-hours in (2) and (3) above must be at least 36. These 36 hours must include 18 quarter-hours at the 4000 level in courses other than directed study.

Master of Science in Meteorology and Physical Oceanography

1. Necessary prerequisite courses in mathematics (through partial differential equations), meteorology, and physical oceanography,

2. The sequence of core courses in the fields of dynamical, numerical, physical and synoptic meteorology and oceanography,

3. An approved selection of graduate elective courses in meteorology and oceanography,

4. A significant educational experience in the field using instruments.

5. An acceptable thesis on a topic approved by the department.

6. The total number of quarter-hours in (2) and (3) above must be at least 48. These 48 hours must include 20 hours at the 4000 level in courses other than directed study, and they should show an approximate balance between the disciplines of meteorology and oceanography.

Master of Science in Physical Oceanography

1. Completion of at least eight physical oceanography graduate courses with at least four courses in the OC4000 series. The sequence of core courses in physical oceanography encompasses the fields of dynamic, acoustical, and coastal/littoral oceanography. The entire sequence of courses selected must be approved by the Department of Oceanography. Significant experience in the field using instruments is required for the degree. (OC3570 satisfies this requirement).

2. At least 32 credit hours of approved graduate study, of which must include at least eight physical

oceanography courses totaling 28 credit hours, and of the 28 credit hours at least 13.5 credit hours must be at the 4000 level in courses other than directed study. Four credit hours of directed study or additional OC elective courses would count for the remainder of the degree requirements.

3. Completion of an acceptable thesis on a topic approved by the Department of Oceanography.

Master of Science in Physics

1. A minimum of 32 quarter-hours of courses at the graduate level.

2. A minimum of 30 quarter-hours of graduate level physics courses (not including thesis); of these 30 hours at least 15 must be at the 4000 level. Upon approval of the Chairman of the Physics Department, a maximum of 4 hours of courses taken in another department may be applied toward satisfying the total physics requirement. Students who are qualified to pursue graduate courses in physics when they arrive at the Naval Postgraduate School may complete a minimum of 20 hours entirely of 4000 level physics courses in place of the 30 quarter-hour physics requirement.

3. Successful completion of the following specific courses (or their equivalents): PH3152 Analytical Mechanics, PH3360 Electromagnetic Waves, PH3991 Theoretical Physics, PH3782 Thermodynamics and Statistical Physics, PH4353 Topics in Advanced Electricity and Magnetism, PH4656 Quantum Mechanics, plus a sequence of two graduate level physics courses, at least one of which must be at the 4000 level.

4. An acceptable thesis advised by a member of the Physics Department.

Master of Science in Applied Physics

1. At least 32 quarter-hours of graduate level courses in physics, mathematics, and engineering including 20 at the 4000 level. Of these 32 hours, at least 20 will be physics courses including 12 at the 4000 level.

2. At least one graduate level course in each of the following areas: mechanics, electromagnetism, and quantum physics. Students will demonstrate additional breadth by taking at least one 4000 level physics course outside their concentration area.

3. An area of concentration containing a four-course sequence of graduate-level courses in addition to the above requirements, at least two at the 4000 level, in an area related to applied physics.

4. An acceptable thesis advised or co-advised by a member of the Physics Department.

Master of Science in Combat Systems Technology

1. A minimum of 32 quarter-hours of graduate work in physics, mathematics, and engineering, with at least 18 quarter-hours at the 4000 level. Included in these hours must be at least 20 quarter-hours of graduate-level physics, including 12 quarter-hours at the 4000 level.

2. Two approved sequences of courses related to combat systems technology. Each sequence must consist of at least four graduate-level courses with at least two courses at the 4000 level. A list of approved sequences is available from the Chairman.

3. A thesis advised or coadvised by a member of the Physics Department.

Master of Science in Space Systems Operations

1. A minimum of 32 quarter-hours of graduate level work is required, of which at least 15 hours must be at the 4000 level.

2. Graduate courses in at least four different subject areas must be included and in two areas, a course at the 4000 level must be included. There is also a requirement of three courses constituting advanced study in an area of specialization.

3. Each student is required to write a thesis that is space oriented.

4. The Chairman of the Space Systems Academic Group must approve all study programs.

Master of Science in Systems Engineering

1. An ABET EAC accredited Bachelor of Science degree in an engineering discipline or established equivalency.

2. Completion of an approved study program that includes:

3. A minimum of 36 quarter credit hours of 3000 and 4000 level courses, 16 of which must be at the 4000 level.

4. A four-course core in systems engineering fundamentals and methods.

5. Completion of a 12 quarter credit hour equivalent team systems engineering project. An acceptable individual thesis may be substituted for the team project if approved by the Department Chair.

Master of Science in Engineering Systems

1. A minimum of 48 quarter-hours of graduate level work.

2. The candidate must take all courses in an approved study program, which must satisfy the following requirements: There must be a minimum of 36 quarter-hours of credits in 3000 and 4000 level courses, including a minimum of 16 quarter-hours at the 4000 level. The course work must include the four core SE courses.

3. The candidate must complete either a 12-hour equivalent team systems engineering project or an individual thesis.

Master of Science in Product Development

1. A minimum of 48 quarter-hours of graduate level work.

2. The candidate must take all courses in an approved study program, which must satisfy the following requirements:

3. There must be a minimum of 36 quarter-hours of credits in 3000 and 4000 level courses, including a minimum of 16 quarter-hours at the 4000 level.

4. The course work must include a four-course core in systems engineering methods.

5. Additional courses must be selected from an approved list.

6. The candidate must complete an approved thesis.

Master of Science in Systems Engineering Management

1. A minimum of 48 quarter-hours of graduate level work.

2. The candidate must take all courses in an approved study program, which must satisfy the following requirements:

3. There must be a minimum of 36 quarter-hours of credits in 3000 and 4000 level courses, including a minimum of 16 quarter-hours at the 4000 level.

4. The course work must include a four-course core in systems engineering methods.

5. Additional courses must be selected from an approved list.

6. The candidate must complete an approved thesis.

Master of Computing Technology

1. At least 40 quarter-hours of graduate-level work, of which at least 12 quarter-hours must be at the 4000 level.

2. Completion of an approved sequence of courses constituting specialization in an area of computing technology.

3. Completion of a capstone paper.

Master of Science in Computer Science

1. At least 40 quarter hours of graduate-level work, of which at least 12 quarter hours must be at the 4000 lev-el.

2. At least 28 of the 40 graduate-level credit hours listed above must be CS, MOVES, SW courses.

3. To ensure a sufficient breadth across the field of Computer Science, the following course topics must be satisfied as part of the course of study or through validation prior to graduation: Artificial Intelligence (CS3310), Networks (CS3502), Automata (CS3101), and Introduction to Computer Security (CS3600).

4. Completion of an approved sequence of courses constituting specialization in an area of computer science.

5. Completion of an acceptable thesis or a capstone project.

Master of Science in Software Engineering

1. At least 40 quarter-hours of graduate-level work, per NPS requirements, and within that 40 hours at least 12 graduate-level Software Engineering courses.

2. Completion of an acceptable thesis in addition to the required course work.

Master of Arts in Identity Management and Cyber Security

1. At least 40 quarter-hours of graduate-level work, per NPS requirements.

2. Completion of the specific sequence of courses satisfying the breadth and subject matter requirements of Identity Management and Cyber Security.

3. Completion of an applications project.

Master of Science in Modeling, Virtual Environments, and Simulation

1. At least 40 quarter-hours of graduate-level work, of which at least 12 quarter-hours must be at the 4000 level.

2. Completion of an approved sequence of courses constituting specialization in an area of Modeling, Virtual Environments, and Simulation.

3. Completion of an acceptable thesis in addition to the required course work.

Master of Science in Information Operations

1. This degree requires 45 quarter-hours of graduate-level work, of which 15 hours must represent courses at the 4000 level.

2. Completion of an acceptable thesis or capstone project.

Master of Science in Defense Analysis

1. This degree requires 45 quarter-hours of graduate-level work, of which 15 hours must represent courses at the 4000 level in at least two disciplines. Within the course program there must be a specialization sequence consisting of at least six courses.

2. In addition to the 45 hours of course credit, an acceptable thesis or capstone project must be completed.

Master of Science in Information Technology Management

1. Completion or validation of core courses in each of the following disciplines: Information Systems, Computer Science, Electrical and Computer Engineering, and Systems Management.

2. Completion of a minimum of 52 hours of graduate-level courses, at least 20 hours of which are at the 4000 level.

3. Completion of an acceptable thesis.

Master of Science in Information Warfare Systems Engineering

1. Completion of a minimum of 45 quarter-hours of graduate-level work, of which at least 15 hours must represent courses at the 4000 level, and in two (or more) discrete disciplines.

2. Graduate courses in at least four discrete academic specialization sequences, minimum, and in two disciplines, a course at the 4000 level must be included.

3. One Systems Engineering class.

4. In addition to the 45 graduate hours of course work, an acceptable thesis must be completed.

Master of Science in Remote Sensing Intelligence

1. Completion or validation of core courses in each of the following disciplines: Space Systems, Physics,

Information Systems, Computer Science, and National Security.

2. Completion of a minimum of 43 graduate level credits, including the required course sequence with alternate courses approved by the Program Manager.

3. Completion of an acceptable thesis.

Master of Science in Systems Technology (Command, Control, and Communications)

1. Completion of a minimum of 45 quarter-hours of graduate-level work in four different academic disciplines, of which at least 15 hours must represent courses at the 4000 level in at least two of the disciplines.

2. Within the course program there must be a specialization sequence consisting of at least three courses.

3. In addition to the 45 hours of course credit, an acceptable thesis must be completed.

Master of Science in Network Operations and Technology

1. Completion of a minimum of 36 quarter-hours of core graduate course work, of which 12 quarter hours must be at the 4000 level.

2. In addition to these 36 hours of core work, students must complete an approved specialization sequence of courses in one of the following areas:

3. Decision Superiority

4. Network Operations

5. Information Systems Management

6. Complete an acceptable thesis or research project approved by the Chairman, Information Sciences Department.

Master of Science in Electronic Warfare Systems Engineering

1. Completion of a minimum of 45 quarter-hours of graduate-level work, of which at least 15 hours must represent courses at the 4000 level, and in two (or more) discrete disciplines.

2. Graduate courses in at least four discrete academic specialization sequences, minimum, and in two disciplines, a course at the 4000 level must be included.

3. One Systems Engineering class.

4. In addition to the 45 graduate hours of course work, an acceptable thesis must be completed.

Master of Science in Operations Research

1. Completion of a minimum of 40 quarter-hours of graduate-level courses with:

2. At least 20 quarter-hours of 4000-level courses, of which at least 16 are OA.

3. An elective sequence approved by the Chairman, Department of Operations Research.

4. Submission of an acceptable thesis on a subject previously approved by the Chairman, Department of Operations Research.

Master of Science in Applied Science (Acoustics), (Operations Research), (Physical Oceanography), or (Signal Processing)

1. A minimum of 32 quarter-hours of graduate level courses relevant to undersea warfare, including at least 20 hours to satisfy a major from either the Physics Department (Acoustics), Operations Research Department (Operations Research), Oceanography Department (Physical Oceanography), or Electrical and Computer Engineering Department (Signal Processing).

2. A sequence of at least 12 hours of graduate level courses representing a specialization in some area other than that of the major.

3. At least 12 hours of coursework at the 4000 level.

4. An acceptable thesis advised or co-advised by a member of the department.

Master of Operational Analysis (Warfare)

1. Completion of a minimum of 40 quarter-hours of graduate-level courses with:

2. At least 20 quarter-hours of 4000-level courses, of which at least 16 are OA.

3. A warfare analysis track approved by the Chairman, Department of Operations Research.

4. At least one additional OR depth track elective sequence approved by the Chairman, Department of Operations Research.

5. Submission of an acceptable thesis on a subject previously approved by the Chairman, Department of Operations Research.

Master of Human Systems Integration

1. Completion of a minimum of 40 quarter-hours of graduate-level courses with:

2. At least 20 quarter-hours of 4000-level courses

3. Human Systems Integration core courses and a series of supporting courses, including coursework in HSI domains, Systems Engineering, Defense Acquisition, Cost Estimation, and Probability and Statistics, all of which are set in a matrix approved by the Chairman, Department of Operations Research.

4. Students are required to demonstrate mastery of Human Systems Integration practice through satisfactory completion of a two-quarter capstone project approved by the Chairman, Department of Operations Research. The quarter-hours earned in the Capstone project are applied towards satisfying the minimum graduate level quarter-hours for the degree.

Master of Science in Human Systems Integration

1. Completion of a minimum of 40 quarter-hours of graduate-level courses with:

2. At least 20 quarter-hours of 4000 level courses.

3. An elective sequence approved by the Chairman, Department of Operations Research.

4. Submission of an acceptable thesis on a subject previously approved by the Chairman, Department of

Operations Research.

Master of Systems Analysis

1. Completion of a minimum of 32 quarter-hours of graduate-level courses with:
2. At least 16 quarter-hours of 4000-level courses.
3. Systems analysis core courses and a Systems Analysis context sequence approved by the Chairman, Department of Operations Research.
4. Students are required to demonstrate mastery of Systems Analysis practice through satisfactory completion of the thesis-equivalent three-course sequence in Systems Analysis Cases culminating in a final project approved by the Chairman, Department of Operations Research. The quarter-hours earned in the Systems Analysis Cases courses are applied towards satisfying the minimum graduate-level quarter-hours for the degree.

Master of Cost Estimating

1. Completion of a minimum of 40 quarter-hours of graduate-level courses with:
2. At least 15 quarter-hours of 4000-level courses.
3. Cost Estimating and Analysis core courses and a series of supporting courses in Probability, Statistics, Defense Acquisition, Financial Management, and Systems Engineering, all of which are set in a matrix approved by the Chairman, Department of Operations Research.
4. Students are required to demonstrate mastery of Cost Estimating and Analysis practice through satisfactory completion of a Capstone Project approved by the Chairman, Department of Operations Research. The quarter-hours earned in the Capstone project are applied towards satisfying the minimum graduate level quarter-hours for the degree.

Master of Science in Cyber Systems and Operations

1. All courses must be satisfied through the course of study or through validation prior to graduation.
2. Completion of a minimum of 40 quarter-hours of graduate-level courses, of which at least 16 quarter hours are CY4000-level courses.
3. To ensure a sufficient breadth in operational understanding of the cyber domain, the following course topics must be satisfied as part of the course of study or through validation prior to graduation: Cyber Policy and Strategy (CY4410), Network Operations in a Contested Environment (CY4600) or Information Operations Systems (EC3760), Cyber Wargame: Defensive Cyberspace Operations (CY4700), Cyber Wargame: Red Force Operations (4710).
4. Minimum degree requirements of the NPS must be met.
5. Completion of an acceptable thesis or capstone project on a subject previously approved by the Chair, Cyber Academic Group.

Master of Science in Applied Cyber Operations

1. All required courses must be satisfied through the course of study or through validation prior to graduation.
2. Completion of a minimum of 40 quarter-hours of graduate-level courses.
3. At least 12 quarter-hours of courses must be at the 4000 level.
4. To ensure a sufficient breadth in operational understanding of the cyber domain, the following course topics must be satisfied as part of the course of study or through validation prior to graduation:
5. Introduction to Cyber Systems and Operations (CY3000),
6. Cyber Communications Architectures (CY3300),
7. Introduction to Computer Security (CS3600),
8. Network Operations in a Contested Environment (CY4600),
9. Cyber Wargame: Defensive Cyberspace Operations (CY4700) or Cyber Wargame: Red Force Operations (4710).
10. Completion of a specialization track.
11. Submission of an acceptable capstone project on a subject previously approved by the Chair, Cyber Academic Group.

Master of Arts in Security Studies

1. Total required credit hours will vary between 48-80 depending on students' length of program.
2. The completion of an approved sequence of graduate courses, including at least two courses at the 4000 level, and one of the following curricula: Strategic Planning and International Organizations and Negotiations, Intelligence, Civil-Military Relations and International Security, or Area Studies (Middle East, Asia, Western Hemisphere, Western Europe or Russia/Eastern Europe/Central Asia track).
3. Successful completion of departmental comprehensive examination or completion of an acceptable thesis.
4. Depending on the curriculum, thesis research may be substituted by a combination of a comprehensive exam and the successful completion of a foreign language program at the Defense Language Institute.

Master of Science in Systems Engineering Analysis

1. A minimum of 48 quarter-hours of graduate-level work.
2. The candidate must take all courses in an approved study program, which must also satisfy the following requirements:
3. A minimum of 36 quarter-hours of credit in 3000 and 4000 level courses, including a mini-mum of 12 quarter-hours at the 4000 level.
4. Participation in a capstone project with a minimum of 12 credits is required for the degree. An acceptable thesis, for a minimum of 12 credits, may be substituted in lieu of a team project. The Academic Associate and

the Program Officer must endorse such a request, which will be subject to final approval by the Chair Professor.

The Master of Science in Computer Engineering

1. A minimum of 52 credits of graduate level work, of which at least 24 credits must be in Electrical and Computer Engineering, Computer Science, or Software Engineering.
2. Specific courses are required by the department, and at least four courses that total a minimum of 12 credits must be in the course sequence 4000-4999.
3. An acceptable thesis for a minimum of 16 credits must be presented to, and approved by, the department.

Ph.D. and D.Eng. Degrees

Doctor of Philosophy in Electrical Engineering

The Department of Electrical and Computer Engineering has an active program leading to the Doctor of Philosophy degree. Joint programs with other departments are possible. A noteworthy feature of these programs is that the student's research may be conducted away from the Naval Postgraduate School in a cooperating laboratory or other installation of the federal government. The degree requirements are as outlined under the general school requirements for the doctor's degree.

Doctor of Philosophy in Applied Mathematics

The Department of Applied Mathematics offers the Doctor of Philosophy in Applied Mathematics degree. Areas of specialization will be determined by the department on a case by case basis. Requirements for the degree include course work followed by an examination in both major and minor fields of study, and research culminating in an approved dissertation. It may be possible for the dissertation research to be conducted off-campus in the candidate's sponsoring organization.

Doctor of Philosophy in Mechanical Engineering

The Department offers Doctor of Philosophy (Ph.D.) degrees in Mechanical Engineering, Astronautical Engineering, and Aeronautical Engineering.

Every applicant who is accepted for the doctoral program will initially be enrolled in one of the following programs: Mechanical Engineer, Astronautical Engineer, or Aeronautical Engineer Program; under a special option which satisfies the broad departmental requirements for the Engineer's degree, which includes research work. As soon as feasible, the student must identify a faculty advisor to supervise research and to help formulate a plan for advanced study. As early as practicable thereafter, a doctoral commit-tee shall be appointed to oversee that student's individual doctoral program as provided in the school-wide requirements for the doctor's degree. Joint programs with other departments are possible.

Doctor of Philosophy in Astronautical Engineering

Same as Doctor of Philosophy in Mechanical Engineering above.

Doctor of Philosophy in Aeronautical Engineering

Same as Doctor of Philosophy in Mechanical Engineering above.

Doctor of Philosophy in Meteorology

The Ph.D. program is offered in the Department of Meteorology in the following areas of study: numerical weather prediction, geophysical fluid dynamics, boundary-layer meteorology, analysis of atmospheric systems and tropical meteorology.

The requirements for the degree are grouped into three categories: course work, research in conjunction with an approved dissertation and examination in both the major and, if elected, a minor field. The minor field is usually in physical oceanography, mathematics or physics.

The Department of Meteorology also may require a preliminary examination to show evidence of acceptability as a doctoral student.

Doctor of Philosophy in Physical Oceanography

The Ph.D. program is in Physical Oceanography, including areas of study in ocean circulation theory, air-sea inter-action, ocean acoustics, nearshore, and coastal/littoral oceanography among others.

Doctor of Philosophy in Physics

The Department of Physics offers the Ph.D. in several areas of specialization which currently include acoustics, electro-optics, free electron lasers, space physics, and theoretical physics.

Requirements for the degree may be grouped into three categories: courses, dissertation research, and examinations.

The required examinations are outlined under the general school requirements for the Ph.D. In particular, the department requires a preliminary examination to show evidence of acceptability as a doctoral student. This examination may be taken before or after commencement of graduate studies at NPS.

The department offers two options for the Ph.D.: major in Physics or major in Applied Physics. For the major in Physics, a minimum of 40 credit hours of physics courses at the 4000 level is required. The major in Applied Physics also requires 40 credit hours of 4000 level courses, but a portion of these hours may be taken in other departments in technical subjects related to physics.

A more detailed description of departmental requirements for the Ph.D. is contained in the booklet "Doctoral Study in Physics or in Applied Physics at the Naval Postgraduate School," available from the Academic Associate.

Doctor of Philosophy in Applied Physics

Same as above, but major in Applied Physics.

Doctor of Philosophy in Engineering Acoustics

The Department of Electrical and Computer Engineering and the Department of Physics jointly sponsor an

interdisciplinary program in Engineering Acoustics leading to the Doctor of Philosophy degree. Areas of special strength in the departments are physical acoustics, underwater acoustics, acoustic signal processing, and acoustic communications. A noteworthy feature of this program is that a portion of the student's research may be conducted away from the Naval Postgraduate School at a cooperating laboratory or other federal government installation. The degree requirements and examinations are as outlined under the general school requirements for the doctorate degree. In addition to the school requirements, the departments require a preliminary examination to show evidence of acceptability as a doctoral student.

Doctor of Philosophy in System Engineering

The Department of Systems Engineering offers a Doctor of Philosophy (Ph.D.) degree in Systems Engineering. Students take graduate level course in systems engineering (as needed to pass the oral and written qualifying examinations), advanced graduate courses in systems engineering and an application domain, and perform research that leads to a dissertation involving some aspect of systems engineering. Research topics may be selected from a broad variety of studies of the systems engineering process, applications of systems engineering to solving complex problems, systems level modeling and simulation, and systems suitability assessment. Subject to approval of the student's dissertation committee chairman, dissertation research may be conducted away from NPS at cooperating facilities. Students must satisfy a one-year residency requirement.

Doctor of Philosophy in Computer Science

Specifics on the Ph.D. in Computer Science program are found in the linked CS Department Ph.D. Handbook.

Doctor of Philosophy in Software Engineering

The Ph.D. program in Software Engineering is designed for DoD software practitioners who want to acquire the skill and knowledge to perform state-of-the-art research on issues related to the development and evolution of large, complex, software systems, and to intelligently manage the research of other software practitioners. It offers the soft-ware professionals a unique program of study and advances software engineering principles and technology vital to DoD researchers and program managers.

The Ph.D. degree is awarded after successful defense of a dissertation that advances the state of the art in Software Engineering. Ph.D. seminars are available to assist students in reaching that goal. See the online handbook for details on admission, requirements, and procedures:

Software Engineering Ph.D. Handbook

Doctorate in Modeling, Virtual Environments, and Simulation

The Ph.D. degree requires the equivalent of at least three academic years of study beyond the baccalaureate level (some of which may be for another post-baccalaureate degree), with at least one academic year (or its equivalent) being spent in residence at NPS. The student must complete, in order, the following steps, which are detailed at www.movesinstitute.org.

Doctor of Philosophy in Information Sciences

The Department offers the Ph.D. degree in Information Sciences. The program begins with advanced course work guided by the Departmental Ph.D. Committee, which leads to qualifying examinations. The primary emphasis then shifts to the student's research program, culminating in the Ph.D. dissertation. Three areas of primary concentration within the field of information sciences are available: information systems, command and control, and information operations/warfare.

Doctor of Philosophy in Operations Research

The program begins with advanced course work guided by the student's doctoral committee and leading to qualifying examinations in optimization, statistics, and stochastic processes as well as completion of a minor field of study outside of operations research. The primary emphasis then shifts to the student's research pro-gram, culminating in the Ph.D. dissertation.

Doctor of Philosophy in Security Studies

The Ph.D. in Security Studies awarded by the Department of National Security Affairs requires one year of in-residence course work beyond the Master's plus at least two years to develop and execute a satisfactory dissertation. While the entirety of the dissertation need not be written in-residence, candidates for the Ph.D. should plan on a three-year tour, which is the norm for doctoral work at NPS.

Doctor of Philosophy in Engineering Acoustics

The Department of Electrical and Computer Engineering and the Department of Physics jointly sponsor an interdisciplinary program in Engineering Acoustics leading to the Doctor of Philosophy. Areas of special strength in the departments are physical acoustics, underwater acoustics, acoustic signal processing, and acoustic communications. A noteworthy feature of this program is that a portion of the student's research may be conducted away from the Naval Postgraduate School at a cooperating laboratory or other federal government installation. The degree requirements and examinations are as outlined under the general school requirements for the doctorate degree. In addition to the school requirements, the departments require a preliminary examination to show evidence of acceptability as a doctoral student.

Doctor of Engineering (Astronautical Engineering)

Knox Millsaps, Dept Chair, wrote on 6 May 2014:

MAE no longer makes a distinction between the Doctor of Philosophy (Ph.D.) and Doctor of Engineering (D.Eng.). Remove Doctor of Engineering (D.Eng.) from catalog.

Doctor of Engineering (Mechanical Engineering)

Knox Millsaps, Dept Chair, wrote on 6 May2014:

MAE no longer makes a distinction between the Doctor of Philosophy (Ph.D.) and Doctor of Engineering (D.Eng.). Remove Doctor of Engineering (D.Eng.) from catalog.

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