

MASTER OF SCIENCE SYSTEMS ENGINEERING FROM NAVAL POSTGRADUATE SCHOOL

PROGRAM ANNOUNCEMENT AND GUIDANCE

1. PURPOSE/PROGRAM DESCRIPTION

a. The MSSE (Master of Science in Systems Engineering) from the Naval Postgraduate School (NPS) has been established to provide NAVAIR engineering employees the opportunity to pursue a Master of Science degree in systems engineering with a naval emphasis. This MSSE program provides professional education and development for military officers and civilians desiring to improve their expertise and/or potential as program systems engineers.

b. The MSSE provides an opportunity for high-potential employees to obtain a Master of Science in Systems Engineering in 24-months of off-duty education from NPS. Participants will take 2 courses per quarter from NPS over 8 quarters, including completion of a Capstone Project. The course outline of the MSSE is provided in a separate attachment. The 48 month (4 year) program is no longer offered, however, if a candidate on the 24 month track and needs to decrease their course load to 1 course per quarter it can be accommodated on a case by case basis. Students should request a decrease in course load at least 6 weeks in advance of the start of the next quarter.

c. Students that have an ABET undergraduate degree are eligible for the Master of Science in Systems Engineering (MSSE) degree. Students that do not have an ABET undergraduate degree are eligible for the Master of Science in Engineering Systems (MSES) degree. NPS, at their discretion, may accept credits from other institutions for granting the degrees.

d. A new cohort of up to 30 students will be formed from military officers and civilians twice yearly, in September (NPS Fall Quarter) and March (NPS Spring Quarter). Classroom courses will be conducted at NAS Patuxent River, Frank Knox Building by resident NPS faculty and by distance learning from NPS via video conferencing (VTC) or desk top computer/internet web conferencing via Elluminate Live. For participants from other NAVAIR sites, these courses will be offered via VTC and/or desk top computer/internet web conferencing by Elluminate Live. Courses will be offered notionally from 1700 to 2000 EST two nights per week (specific evenings TBD) depending upon the cohort schedule. These courses are not intended to be attended during duty hours.

e. To effectively participate in the MSSE program, sites must provide access to a classroom setting with VTC capability to connect with the Frank Knox VTC or NPS VTC during class hours. To use web conferencing by Elluminate Live, students must have access to desktop or laptop computers with a microphone (mandatory) and camera (optional) with internet connectivity, preferably broad band. Use of NMCI desktop or laptop computers is acceptable for connectivity to NPS but cameras are not allowed. Students do not need access to an NMCI computer during the VTC class hours.

f. Tuition and associated fees for NPS will be provided by the MSSE program. Funding for the program is expected to come from the Defense Acquisition Workforce Development Fund (Section 852). Students are responsible for their own books and associated supplies. **Students must be members of the Acquisition Workforce to be admitted into the program.**

g. Students enrolling in the MSES program will be expected to complete the MSSE program.

1) Civilian students are expected to complete the program and are required to sign a Continued Service Agreement (CSA). This agreement must be signed by the student enrolled in the NPS MSSE program prior to beginning the training. Pursuant to the CSA, each student agrees to continue his/her employment with NAVAIR for sixteen (16) work weeks after completion of the training.

2) Military students will incur an Active Duty obligation. For Naval Officers, the Graduate Education Service Obligation is put forth in NAVADMIN 195/07 (CNO 061710Z AUG 07), usually, three years after completion of or withdrawal from education...(to be served concurrently with any other obligation. Other services, obligation is determined and tracked by service-member's service as per two following dictates: Title 10, U.S. Code-Armed Forces; Subtitle A, Part III, Chapter 101, Sec 2005 and DODDIR 1322.10. See http://www.nps.edu/Admissions/GradEd_ServiceObligation.html

h. If a student withdraws from the MSSE program or fail a course, they will be expected to reimburse the government for the tuition and fees for that quarter. (FY12 tuition is estimated at \$1,800 per quarter course). NAVAIR may waive this requirement upon Command judgment that the cause(s) for the student's withdrawal/failure are beyond the student's control, e.g., reassignment, illness, etc. Students shall inform AIR 4.0 in writing (an e-mail to Debbie Greco (4.1) is acceptable notification) of their intent or need to withdraw from the program, or a course, within one week after deciding to withdraw.

i. Minimum requirements for selection for civilian enrollment in the NPS MSSE program are that, at the time of application, the prospective student have a technical degree (Bachelor of Science), and have completed coursework in calculus.. Additionally, at the time of application, the prospective student shall have completed ACQ-101. Desired requirements are that, at the time of application, the prospective student has a bachelor of science in engineering, their primary career field be System Planning, Research, Development and Engineering (SPRDE), and be Level II in the SPRDE career field.

(a) If a prospective student has not completed coursework in calculus, they may be conditionally admitted, subject to successful completion of the calculus prerequisite. In this case, the prospective student should take equivalent courses at a local regionally accredited college or university in order to satisfy the prerequisite requirement (see SE program website for more information). A calculus refresher course is offered at Patuxent River.

j. Minimum requirements for selection for military officer enrollment in the MSSE program are, at time of application, the officer shall be an O-3, O-4 or O-5, shall have completed ACQ-101 and have completed coursework in calculus. Desired requirements are that, at the time of application, the prospective student has a bachelor of science in engineering, their primary career field be System Planning, Research, Development and Engineering (SPRDE), and be Level II in the SPRDE career field.

2. RESPONSIBILITIES

a. **Career Development Office (CDO).** The CDO shall provide for the distribution of the announcement nationally within NAVAIR.

b. **Managers.** Managers reviewing employee's request for the MSSE from NPS should consider:

(1) Current mission and anticipated requirements, expected employee turnover, and availability of employee(s) to participate in the program.

(2) At the completion of the MSSE from NPS, managers will conduct program evaluations to assess the impact of the training experience.

c. **Systems Engineering Department (AIR-4.1).** Provide overall coordination for the MSSE program. Form and convene the MSSE Prioritization Board to identify likely students for the Spring 2012 (Cohort 9) and, after consultation with Level 2 Competency Heads, formulate a recommended set of primary and alternate students for the cohort consistent with available funding. Apply experience and lessons learned to continuously improve the MSSE program for the entire NAVAIR Team.

d. **Prospective Students. Prospective students (military and civilian) should complete the application process (described in paragraph 3), by 12 December 2011.** Note: Prospective students who applied for previous MSSE programs, but were not selected, must re-apply to NAVAIR for this cohort that begins in Spring 2012.

3. SUBMISSION/SELECTION PROCESS TIMELINE:

Week of 10 October 2011. Announcement for submission of applications for MSSE cohort to begin Spring (March 2012).

By COB 12 December 2011. Prospective students follow **three step concurrent process for application** described below:

(1) Prospective students electronically submit the NAVAIR Master of Science in Systems Engineering, application, which is included with this announcement, to NAVAIR to Debbie Greco (4.1) at deborah.greco@navy.mil and Ann Weisser (4.0C) at

ann.weisser@navy.mil. The application requires an endorsement from the immediate supervisor which can be provided either with the application or via separate e-mail. Applicants do NOT have to submit their application through Navy ERP. Note: Prospective students who applied for previous MSSE programs, but were not selected, must resubmit an application to NAVAIR, but DO NOT need to reapply to NPS if they had previously met the academic requirements.

(2) Prospective students must also fill out the Naval Postgraduate School on-line application at the website. <https://www.nps.edu/Admissions/AMS/Login.aspx>

- a. Instructions for the on-line application are attached. **PLEASE READ THESE INSTRUCTIONS BEFORE COMPLETING THE ON-LINE APPLICATION.**
- b. The NPS website lists this as the Systems Engineering Non-Resident Master's Degree Program.

(3) Prospective students must have their OFFICIAL SEALED transcripts (including Test Pilot School) of ALL undergraduate and previous graduate work to date (degree and non-degree) **mailed directly from school(s) attended to the NPS Admissions Office** to the following address:

Admissions Office, Code 01C3
Attn: Distributed Learning Program (Official Transcripts)
Naval Postgraduate School
1 University Circle, He-022
Monterey, CA 93943-5100

If the school you attended participates in electronic transcript delivery, your transcripts may be submitted to grad-ed@nps.edu, but they must be sent directly from school(s) attended.

DO NOT DELAY in arranging for transcripts to be sent – they must be received at NPS prior to the selection process.

PROSPECTIVE STUDENTS MUST COMPLETE THE THREE STEP PROCESS TO BE CONSIDERED FOR THE PROGRAM. ALL THREE STEPS MUST BE COMPLETED BY 12 December.

Week of 16 January 2012.: AIR 4.1 shall convene a Prioritization Board to identify students as likely primary and alternates for the next cohort for the MSSE from NPS

program. Prospective students must meet the minimum requirements for selection to the MSSE from NPS program. The Prioritization Board will review the applications and prioritize them in accordance with their potential for success in the MSSE from NPS based upon:

1. Job performance to date, including non-academic awards/commendations/recognition
2. Demonstrated self development to date (self funded and government funded)
3. Attainment of desired requirements
4. Academic credentials (degree(s) held, GPA, academic honors/awards received)
5. Motivation for enrolling in the MSSE from NPS program
6. Supervisor endorsement to include feedback prospective student's job performance and ability to balance job and class workload.

Week of 23 January 2012: AIR 4.1G will provide National Level 2 Competency Heads with the likely primary and alternates from their Competency.

Week of 30 January 2012: National Level 2 Competency Heads will provide endorsements on their primary and alternate candidates.

Week of 6 February 2012: After consultation with the Level 2 Competency Heads, as necessary, the Chairperson of the Prioritization Board will formulate a recommended set of primary and alternate students for the cohort and forward to NPS.

Mid February 2012: AIR 4.1G will notify competencies and prospective students of acceptance/non-acceptance in the NPS MSSE cohort to begin March 2012.

4. POINTS OF CONTACT

- a. Technical questions regarding the program may be directed to Debbie Greco, AIR 4.1, MSSE Deputy Program Manager, 301-342-7132 or Kimberly Johnson, Systems Engineering Processes and Policy, AIR 4.1.G Training Coordinator, 301-757-2232.
- b. Applications should be submitted electronically to Debbie Greco, deborah.greco@navy.mil and Ann Weisser, ann.weisser@navy.mil