DEPARTMENT OF DEFENSE 6000 DEFENSE PENTAGON WASHINGTON, DC 20301-6000

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CHIEF INFORMATION OFFICER

MEMORANDUM FOR SECRETARIES OF THE MILITARY DEPARTMENTS CHAIRMAN OF THE JOINT CHIEFS OF STAFF UNDER SECRETARIES OF DEFENSE COMBATANT COMMANDERS ASSISTANT SECRETARIES OF DEFENSE GENERAL COUNSEL OF THE DEPARTMENT OF **DEFENSE** DIRECTOR, OPERATIONAL TEST AND EVALUATION DIRECTOR, COST ASSESSMENT AND PROGRAM **EVALUATION** INSPECTOR GENERAL OF THE DEPARTMENT OF **DEFENSE** ASSISTANTS TO THE SECRETARY OF DEFENSE DIRECTOR, ADMINISTRATION AND MANAGEMENT DIRECTOR, NET ASSESSMENT DIRECTORS OF THE DEFENSE AGENCIES DIRECTORS OF THE DOD FIELD ACTIVITIES

SUBJECT: DoD Information Assurance Scholarship Program Academic Year 2011-2012: Education Opportunity for Civilian and Military Personnel

The Office of the Assistant Secretary of Defense for Networks and Information Integration (OASD(NII) / DoD Chief Information Officer (CIO) is announcing the annual opportunity for employee participation in the retention component of the DoD Information Assurance Scholarship Program (IASP). Chapter 112, title 10, United States Code authorizes the DoD IASP retention program, which provides professional development opportunities for current employees who support DoD's critical information assurance and information technology (IA/IT) management and infrastructure protection functions. Under the program, selected DoD civilian employees and military members can earn graduate degrees in several disciplines, all of which have an IA concentration.

Components are requested to nominate qualified civilian employees and military members to receive full scholarship assistance to pursue a master's degree or doctoral program in Academic Year 2011-2012. The participating institutions offering programs of instruction, leading to a master's or doctoral degree are: the Air Force Institute of Technology at Wright-Patterson AFB, Ohio; the Information Resources Management College of the National Defense University in Washington, DC, in conjunction with one of



the 27 IASP Partner Universities; and the Naval Postgraduate School in Monterey, California. Employees selected for the program receive scholarships for tuition, books and fees in exchange for service payback.

Information is provided in the attachment on eligibility requirements, Component allocation, service obligations, and application procedures. All scholarship awards are contingent on funding availability. Component prioritized requirements are due no later than January 31, 2011, to the DoD IASP Executive Administrator, the National Security Agency (NSA).

We look forward to your participation in the retention program this year. Please contact the DoD IASP Executive Administrator at askiasp@nsa.gov or the DoD CIO IASP point of contact, Ms. Tina-Marie Buckman, Office of the DoD CIO, CIO Management Services at tina-marie.buckman@osd.mil, (703) 699-0105 regarding questions about the program. You may also call (703) 699-0145.

David M. Wennergren

Deputy Chief Information Officer

Attachment(s): As stated

DoD IASP Retention Program Guidelines for DoD Civilian and Military Personnel Academic Opportunities for Calendar Years 2011 and 2012

Eligibility Requirements. Active duty military members and permanent DoD civilian employees are eligible to apply. Nominated personnel shall be high performing employees who are rated at the higher levels of the applicable performance appraisal system and demonstrate sustained quality performance with the potential for increased responsibilities. Scholarship applicants must meet all requirements for acceptance to the specific institution they plan to attend. All eligibility criteria, especially academic credentials, should be carefully reviewed as IASP requirements may be more stringent than general academic enrollment criteria for a particular college/university. All nomination packages should be submitted by the Component's Office of Primary Responsibility (OPR) for administering the IASP and not by individual employees.

Academic Disciplines. For participation in the IASP, qualified employees must pursue graduate degrees in academic disciplines that have a concentration in Information Assurance (IA). Such disciplines include, but are not limited to: biometrics, business management or administration, computer crime investigations, computer engineering, computer programming, computer science, computer systems analysis, cyber operations, cybersecurity, database administration, data management, digital and multimedia forensics, electrical engineering, electronics engineering, information security (assurance), information systems, mathematics, network management/operations, software engineering, and other similar disciplines as approved by the Assistant Secretary of Defense for Networks and Information Integration/DoD Chief Information Officer (ASD(NII)/DoD CIO).

Scholarship Quotas. No quotas are designated. The actual number of scholarships available will be contingent on the total number of eligible applicants and available funding. Components' nominations must go through the correct chain of command to the OPR for administering the IASP. The OPR shall ensure all nominations fulfill the specific academic and personnel development requirements for both the individual nominee and the nominating organization. The OPR must also prioritize the requested scholarship recipients.

<u>Participating Institutions</u>. The institutions offering full-time academic programs leading to a master's or doctoral degree are the Air Force Institute of Technology (AFIT), the Information Resources Management College (IRMC) of the National Defense University (NDU), in conjunction with IRMC's IASP Partner Universities, and the Naval Postgraduate School (NPS).

Part-time academic programs leading to a master's degree are available only through IRMC and selected partnering institutions. Attendance at IRMC is typically full-time through its Advanced Management Program, however, current part-time students at IRMC who already have completed <u>7 or more classes</u> towards a qualified certificate program, may apply for the scholarship program. IRMC students who graduate from the required programs may complete their degree part-time at one of the applicable partnering institutions.

<u>Academic Start Dates</u>. Each school (AFIT, IRMC and NPS) offers two potential start dates for students:

- AFIT: August 2011 or January 2012
- IRMC + Partner University: September 2011 or January 2012
- NPS: July 2011 or January 2012

<u>Program Costs</u>. The cost of tuition, required fees and books at AFIT, IRMC, IRMC's partnering institutions, and NPS will be covered by the program. Students will continue to receive their military pay or civilian salaries from their Component throughout their course of study. Components are also responsible for all travel costs and any necessary position back-fill for individuals selected for the program.

Obligations. Retention students shall fulfill post-academic service obligations pursuant to 10 U.S.C. 2200. Students are obligated to maintain good standing in their degree programs, to continue in service as civilian employees or military members, and where applicable, to repay program costs for failure to complete the degree program satisfactorily or to fulfill the service commitment consistent with 10 U.S.C. 2200a (b)(2) and (3) and the policies of the Department and the respective Component.

- Members of the Military Services shall serve on active duty while fulfilling service obligations defined by their respective Component.
- DoD civilian employees shall sign a continued service agreement that complies with 10 U.S.C. 2200, prior to commencement of their education, to continue service within the Department of Defense upon conclusion of their education, for a period equal to three times the length of the education period.

Selected students also may be required to sign a Student Code of Conduct Agreement, a Family Educational Rights and Privacy Act (FERPA) waiver required for release of transcripts, a SF-182 (Request, Authorization, Agreement, Certification of Training and Reimbursement) and other additional agreement forms.

Student Nomination Process for All IASP Retention Program Options

All nomination packages must be unclassified and submitted through appropriate Component personnel channels for graduate education programs. <u>Each package must include all applicant requirements</u>. Incomplete packages will be rejected.

Applicant Requirements.

- 1. Applicant coversheet must include the following information:
 - a. Applicant contact information
 - 1) Office mailing address
 - 2) Office email address
 - 3) Phone numbers (voice/fax)
 - b. Supervisor contact information
 - 1) Name
 - 2) Email address
 - 3) Phone numbers (voice/fax)
 - c. Component contact information
 - 1) Name
 - 2) Email address
 - 3) Phone numbers (voice/fax)
 - d. List of previous colleges/universities attended
 - 1) School name
 - 2) Degree
 - 3) GPA
 - e. Proposed college/university (AFIT, IRMC + Partner University, or NPS). Applicants may provide up to three choices.
 - 1) Proposed degree program
 - 2) Proposed start date
 - 3) Proposed student status
 - a) All students attending AFIT are full-time
 - b) All students attending NPS are full-time
 - c) IRMC applicants must include requested IRMC student status (full-time or part-time) and requested Partner University student status (full-time or part-time)
- 2. Continued Service Agreement.
- 3. Standard military or civilian personnel resume.
- 4. Current SF 50 (DoD civilians only), dated within one month of the scholarship application.

- 5. Applicant's personal goals statement (4-6 double spaces pages; see Appendix B).
- 6. Recommendation from the individual's supervisor with the endorsement of the next level supervisor. (Recommendations and endorsements should highlight how the student's IA education will be used).
- 7. Copy of GRE or GMAT scores. (This is a DoD IASP requirement for all schools).
- 8. Unopened, sealed, official transcripts for all undergraduate and graduate work. (Transcripts from DoD schools must be included).
 - a. The DoD IASP Executive Administrator will provide official transcripts to AFIT, IRMC, or NPS.
 - b. The DoD IASP Executive Administrator will not provide official transcripts to partner colleges/universities; it is the responsibility of the student to do so.
- 9. Copy of each transcript that reflects undergraduate and/or graduate coursework, as appropriate. (Transcripts from DoD schools must be included).
- 10. Documentation of the individual's security clearance.

Component Requirements.

- 1. Components must compile a single nomination package containing all proposed/approved applicant packages. Since no quotas have been allotted to the Components, it is important that applicant packages are provided in a prioritized, rank-order of preference, with alternate nominees listed as appropriate. The cover letter must include a privacy banner which reads: "Privacy Sensitive any misuse or unauthorized access may result in disciplinary action" and clearly identifies the following information:
 - a. Nominated applicants, listed in rank order of recommended selection
 - b. Full name of applicant
 - c. Proposed college/university (AFIT, IRMC + Partner University, or NPS) for each applicant
 - d. Proposed degree program for each applicant
 - e. Start date
 - f. Proposed student status
 - 1) AFIT students are full-time only
 - 2) NPS students are full-time only
 - 3) IRMC nominations must designate the following:
 - a) IRMC student status, full-time or part-time

- b) Partner University student status, full-time or part-time
- 2. Component's OPR Contact Information
 - a. Name(s)
 - b. Work address
 - c. Email address
 - d. Phone numbers (voice/fax)
- 3. One original copy of each nomination and applicant package must be provided to:

National Security Agency 9800 Savage Road Fort Meade, Maryland 20755-6722

ATTN: IASP/NIETP I924, FANX III, B5C19 Suite # 6722

EACH APPLICATION PACKAGE REQUIRES ORIGINAL TRANSCRIPTS; ORIGINAL TRANSCRIPTS SHOULD NOT BE OPENED BY THE COMPONENTS.

4. Prioritized Component nominations for all start dates are due by January 31, 2011.

General questions on the IASP and/or the nomination process should be addressed to the DoD IASP Executive Administrator via email at askiasp@nsa.gov.

Notification of Acceptance—All Schools

Based on funding, a determination on the number of scholarships to be awarded will be made by the Information Assurance Scholarship Program Steering Committee. Once this determination is made, a representative of the Committee will coordinate with the three DoD schools to determine final acceptance of applicants. Components will be formally notified of applicant acceptances by March 31, 2011. Applicants should contact their Component's OPR regarding acceptance into the IASP. The DoD IASP Executive Administrator will not notify applicants directly.

Air Force Institute of Technology (AFIT)

The AFIT offers Master of Science degrees with majors in Cyber Operations, Information Resources Management (IRM), Electrical Engineering, Computer Engineering and Computer Science. The Cyber Operations major provides an in-depth study of the defensive and offensive theory, tools, and techniques associated with protection and exploitation of information-based systems. The other majors stated above allow for specialization in IA through a subset of courses from the Cyber Operations degree program. All degree participants completing the IA specialization will receive NSTISSI 4011 and CNSSI 4012 certificates. More detailed information about the IA program may be found at http://www.afit.edu/en/ccr/index.cfm/. Doctoral degree opportunities in Electrical Engineering, Computer Engineering and Computer Science are also available. Classes at the AFIT begin August 2011 and January 2012.

MS in Cyber Operations, IRM, Electrical Engineering, Computer Engineering and Computer Science:

- Full-time, in-residence only.
- Requires eighteen months for completion; an individual student's program may be extended if prerequisite knowledge is needed.
- All MS degree students must complete thesis research and a written thesis.

PhD in Computer Science:

- Full-time, in-residence only.
- Requires three years to complete; an individual student's program may be extended if prerequisite knowledge is needed.
- All PhD students must complete a doctoral dissertation.

<u>AFIT Requirements</u>. Listed below are the minimum eligibility requirements for participation in the IASP through AFIT. These requirements will not be waived.

- Civilian and military applicants may be of any grade.
- Applicants pursuing a master's degree must have an appropriate bachelor's degree with a minimum 3.0 GPA. Applicants pursuing a doctorate must have an appropriate master's degree and a 3.5 GPA.
- Required GRE scores for all degree applicants: 550 verbal/650 quantitative.
- The minimum security clearance is Secret (or students must be eligible to apply for Secret clearance upon acceptance).

Questions concerning AFIT programs should be addressed to either Dr. Rick Raines at Comm: (937) 255-6565, ext 4278; DSN 785-6565, ext 4278; or via email at richard.raines@afit.edu.

Information Resources Management College of the National Defense University

The scholarship program, as conducted by IRMC, focuses on DoD civilian employees and military officers who wish to pursue a full-time or part-time master's degree or a full-time doctorate in an IA discipline. Applicants are nominated to enter the program in September 2011 or January 2012. Selected students will complete the first part of their degree through IRMC and then enter a Partner University to complete the remaining degree requirements.

- Full-time students complete the CIO certificate and 4011 certificate requirements through the Advanced Management Program (AMP), a 14-week resident program at the Ft. McNair, Washington DC, campus, plus one additional course that they may take via distance learning, either in advance of or at the same time as AMP.
- Part-time IRMC students may apply for the DoD IASP <u>after they have completed</u> 7 or more courses required for completion of their designated IRMC certificate.
- Students must complete both the CIO and 4011 certificates prior to continuing their study with one of the IRMC partner colleges/universities. This will require students to successfully complete the "Global Enterprise Networking and Telecommunications" (GEN) course for grade prior to starting AMP. The GEN course may be taken in in-residence or through distributed Learning (DL).

Nominees may also include candidates who have earned the IRMC CIO and IA certificates in FY07 or later. Further specifics on the IRMC CIO and IA programs may be found at www.ndu.edu/irmc.

Student Code of Conduct Agreements/Orientation. All students participating in the DoD IASP through IRMC must sign a student agreement regarding their expected behavior as a graduate student. Full-time students are required to sign this agreement prior to starting classes at IRMC. Part-time students will sign the agreement upon entering the IASP program either at the start of their 8th or 9th course. In addition, graduating IASP students will be required to attend a student development session at IRMC before transitioning to their selected Partner University.

<u>Partner Colleges/Universities</u>. Upon successful completion of the IRMC requirements, students will continue their studies at the selected Partner University to complete their master's degree or doctorate. Full-time doctoral students will complete most requirements in residence; full-time or part-time master's students may complete their degrees in residence or through distributed learning. Availability of distributed learning courses and part-time programs vary by Partner University.

Students entering partner colleges/universities will receive 9, 12, or 15 transfer credits toward completion of their advanced degrees, dependent on the selected college/university. The degree the student earns varies by institution, but each degree

includes an IA focus. Appendix A includes a listing of the current IASP IRMC/Partner University approved degree programs. For additional information on all IRMC/Partner University degree programs, visit http://www.ndu.edu/iCollege/network/ntwk_list1.html. Note: IRMC has many partnership agreements for various academic programs listed on the site. IASP students may only participate in the IRMC Partner University degree programs identified as "IASP-qualified".

<u>IRMC Requirements</u>. Listed below are the minimum eligibility requirements for participation in the IASP through IRMC and designated partner colleges/universities. These requirements will not be waived.

- Civilian applicants must be a permanent GS/GM-12 or above (or equivalent). Active duty military applicants must be an O-4 or above.
- IRMC requires that master's degree applicants have a bachelor's degree with a minimum grade point average (GPA) of 3.0 out of 4.0, or equivalent; PhD applicants must have a master's degree with an attained GPA of 3.2 out of 4.0, or equivalent. All degrees must be from regionally accredited colleges/universities. Please note, the partner colleges/universities may require a higher grade point average and/or prerequisite courses.
- Due to the submission timeline, applicants must have already taken the Graduate Record Examination (GRE), the Graduate Management Admission Test (GMAT), or equivalent.
- All applicants must possess at least a Secret clearance.

Questions concerning IRMC programs and those of its partnering institutions should be addressed to Mr. Gil Duvall at Comm: (202) 685-3889, DSN 325-3889 or via email at duvallg@ndu.edu.

Naval Postgraduate School (NPS)

Classes at the Naval Postgraduate School begin July 2011 and January 2012.

Applicants may apply for either the Master of Science (MS) degree or PhD in Computer Science. Enlisted service members may apply for the MS program.

All students in the NPS program will receive, upon successful completion of the required courses, the NSTISSI 4011 and 4015, and the CNSSI 4012-4014 certificates as part of their education program. Details of the IA program at NPS may be found at http://cisr.nps.edu/.

MS in Computer Science:

- Full-time, in-residence only.
- Requires 7 to 8 academic quarters to complete, which corresponds to a two year program.
- All MS degree students must submit quarterly transcripts/progress reports, complete thesis research and write a thesis.

PhD in Computer Science:

- Full-time, in-residence only.
- Requires three years to complete.
- All PhD students must submit quarterly transcripts/progress reports, and complete both written and oral qualifying examinations as specified by the Computer Science Department. Upon completion of required examinations, students complete dissertation research.
- Students must successfully defend their dissertation before a dissertation committee.

The NPS Department of Computer Science is described in more detail at www.nps.navy.mil/cs/.

<u>NPS Requirements</u>. Listed below are the minimum eligibility requirements for participation in the IASP through NPS. These requirements will not be waived.

- GS-9 grade level or higher (or equivalent); E-4 through E-9; WO-1 through WO-4; O-1 or higher (typical student is an O-3).
- MS degree program: bachelor's degree with a minimum 3.0 GPA (on a 4.0 scale) or equivalent.
- PhD program requirements are determined individually based on colleges/universities attended, years since last degree, work-related

accomplishments, and other factors. Generally, NPS requires PhD candidates to be in the upper half of their MS program peers.

- A copy of GRE or GMAT scores.
- Students must have, or be eligible to apply for, a Secret clearance upon acceptance.

Questions regarding the NPS program should be addressed to Mrs. Valerie Linhoff at Comm: (831) 656-2726, DSN 756-2726 or via email at vllinhof@nps.edu.

IASP IRMC/Partner University Approved Degree Programs

Students entering IASP IRMC Partner Universities will receive 9, 12, or 15 transfer credits toward completion of their advanced degrees, dependent on the selected college/university. The degree the student earns varies by institution, but each degree includes an IA focus. This Appendix provides a listing of the current IASP IRMC Partner University approved degree programs. For additional information on all IRMC Partner University degree programs, visit http://www.ndu.edu/iCollege/network/ntwk_list1.html. Note: The IRMC has many partnership agreements for various academic programs listed on the site. IASP students may only participate in the IRMC Partner University degree programs identified as "IASP-qualified".

Masters Programs

Auburn University

- Computer Science (MS)
- Information Systems (MS)
- Software Engineering (MSWE)

California State Polytechnic, San Bernardino

• Business Administration (MBA-IA)

Capitol College

- Business Administration (MBA)
- Computer Science (MS)
- Information Assurance (MSIA)
- Information and Telecommunications Systems Management (MS-ITSM)

East Carolina University

- Technology Systems (MS) with concentrations in:
 - Digital Communications
 - Computer Network Management
 - Information Security

Eastern Michigan University

• Information Assurance (MSIA)

George Mason University

• Information Systems (MSIS)

- Information Security and Assurance (MS-ISA)
- Software Engineering (MS-SWE)

Georgetown University

• Computer Science (MSCS)

James Madison University

- Business Administration (MBA/IS) with Information Security focus
- Computer Science (MSCS/IS) with Information Security focus

Mississippi State University

- Computer Science (MSCS) with an IA concentration
- Master of Engineering
- Information Systems (MS) with an IA concentration
- Project Management (MBAPM) with an IA concentration

Missouri University of Science and Technology

• Computer Science (MS)

New Jersey City University

• National Security Studies (MSPSS)

Northeastern University

- Professional Studies in Informatics (MPSI)
- Information Assurance (MSIA)

Norwich University

• Information Assurance (MS)

Pace University

- Computer Science (MS)
- Internet Technology (MS)
- Information Systems (MS)

Regis University

- Database Technology (MS)
- Information Assurance(MS)
- Information Technology Management (MS)
- Systems Engineering (MS)
- Software Engineering (MS)

Southern Methodist University

- Security Engineering
- Software Engineering

Syracuse University

• Information Management (MSIM)

University of Arkansas Little Rock

- Computer Science (MScCS)
- Information Quality (MScIQ)

University of Dallas

• Information Assurance (MS or MBA)

University of Detroit Mercy

- Information Assurance (MSIA)
- Computer and Information Systems (MS-CIS) with concentration in Software Management

University of Maryland Baltimore County

- Computer Engineering (MS)
- Computer Science (MS)

University of Maryland University College

- Information Technology (MS) with specializations in:
 - Informatics
 - Information Assurance
 - Project Management
- Technology Management (MS) with specializations in Information Systems and Services
- Management (MS) with various specializations

University of North Carolina at Charlotte

• Information Technology (MS) with a concentration in Information Security and Privacy

University of Pittsburgh

- Information Science in the Security Assured Information Track (MSIS-SAIS)
- Telecommunications and Networking in the Security Assured Information Track (MST-SAIS)

University of Texas, San Antonio

• Information Technology (MSIT) with an Infrastructure Assurance concentration

University of Tulsa

• Computer Science (MS) with IA concentration

Walsh College

• Information Assurance (MS)

PhD/Doctorate Programs

Auburn University

• PhD Computer Science

George Mason University

- Doctorate of Science in Information Technology
- Doctorate of Science in Computer Science

Mississippi State University

- Computer Science (PhD) with IA emphasis
- Computer Engineering (PhD) with IA emphasis
- Information Systems (PhD Business Administration) with IA emphasis

Missouri University of Science and Technology

• Computer Science (PhD)

University of Arkansas at Little Rock

- Applied Science (PhD)
 - o Applied Computing
 - o Information Quality
- Integrated Computing (PhD)
 - o Computer Engineering
 - o Computer Science
 - o Information Quality
 - o Information Science

University of Maryland, Baltimore County

• Computer Science (PhD) (case-by-case basis) with IA emphasis

University of North Carolina at Charlotte

• PhD in Information Technology

University of Tulsa

• Computer Science (PhD) (IA Track)

Retention Program Applicant Personal Goals and Knowledge, Skills and Attributes (KSA) Statement

Retention students are required to complete a personal goals and KSA statement. The length should be 4 to 6 double-spaced pages.

Guidance for retention student applicants:

Describe how your professional and academic background makes you a suitable choice for the DoD Information Assurance Scholarship Program (IASP). Explain why you chose the college/university and degree program listed on your applicant coversheet and how the program in particular would benefit you. Describe your desired career goals and how you believe the DoD IASP will enable you to achieve these goals.

Areas to consider addressing in your personal goals statement:

- What are your most compelling reasons for becoming a DoD IASP Scholar?
- How will this degree prepare you for your future career?
- How will your organization/service use your skills and expertise following your receipt of an advanced degree?
- What makes you a strong candidate for graduate school?
- Provide examples/demonstrate your effectiveness in your profession or field and assess your knowledge and ability in the following six competency areas:
 - Knowledge of the techniques of the information security discipline, including encryption, access control, physical security, training, threat analysis and authentication.
 - Knowledge of the human factors in information security, including human computer interaction, design, training, sabotage, human error prevention and identification, personal use policies and monitoring.
 - Ability to identify and analyze problems, distinguish between relevant and irrelevant information to make logical decisions, and provide solutions to individual and organizational problems.
 - Ability to consider and respond appropriately to the needs, feelings and capabilities of different people in different situations.
 - Ability to make clear and convincing oral presentations to individuals or groups; listen effectively and clarify information as needed; facilitate an open exchange of ideas; and foster an atmosphere of open communication.
 - Ability to express facts and ideas in writing in clear, convincing and organized manners appropriate to the audience and occasion.