Norwich University MSIA

by M. E. Kabay, PhD, CISSP
Associate Professor, Computer Information Systems
Norwich University, Northfield VT

In November 2001, I was asked to help create a new graduate program in information assurance (IA) at Norwich University.

Information assurance--the protection of information from attack, human error, or mechanical failure--is one of the most rapidly growing fields within the information technology industry. In 2000, $10.3 billion was spent by corporations on information assurance. This amount that is projected to grow to $31.8 billion by 2005.

The growth in IA spending will foster an increased demand for information assurance professionals in the near future. The U.S. is likely to face a shortfall of 50,000 to 75,000 IA professionals in the next few years. Because of this demand, starting salaries for Master’s-level IA professionals run around $85,000.

Norwich University has been designated a Center of Excellence in Information Assurance Education by the National Security Agency. This designation recognizes Norwich’s leadership in the field and will provide federal support for programs, conferences, and scholarships in IA. The designation has helped propel the new Master’s degree in Information Assurance (MSIA). The MSIA draws together Norwich faculty and leading experts in the field to create a comprehensive 18 month curriculum on all facets of information security. The program is delivered online through interactive seminars. This “anytime, anywhere” element allows busy professionals to fit education into their lives. Students will also meet on campus for a two-week residency and conference on information security at the end of their program.

One of the most original and exciting aspects of the program is the application of the student’s learning to his or her own company. Our merging of theory and practice is unique among IA programs. Our students will use their own employer as a case study by analyzing its systems and making recommendations at the end of each seminar. Employers will reap immediate benefits from their employees’ education, and students will complete the program already having had practical experience in the field.

In creating the curriculum for the program, we have leveraged two years of work that Sy Bosworth and I did with 46 colleagues in creating the _Computer Security Handbook, 4th Edition_ (CSH4) published by Wiley in April 2002. This text provides the core readings for the MSIA – around half of the total material. The rest of the material is provided by our instructors based on their own expertise and professional insights. In the MSIA, as in the CSH4, we are structuring the course material to follow a natural life-cycle view of information assurance. We start with security fundamentals, cover basic management skills (much of this comes from our MBA program), move on to threats and vulnerabilities, examine technical defenses, discuss human factors in defending information, study detection and remediation, spend a long time on management’s role in making IA work, and finish with a review of hot topics in the field such as medical records security, use of encryption across national boundaries, censorship and content filtering, privacy in cyberspace, anonymity and identity, and the future of IA. To our delight,
many of the contributors to CSH4 have enthusiastically responded to our invitation to help teach
the program.

On the administrative side, I am delighted to announce that Dr John Orlando has accepted the
position of Assistant Director. He brings years of experience with online university education to
us and is tasked with supporting students and faculty to achieve the highest level of student
satisfaction and achievement. With the enthusiastic support and expertise of Dr Fred Snow,
Dean of Graduate Programs, and of Dr Frank Vanacek, Head of the Business Division, all of us
are looking forward to an exciting program launch in September.

Response to a brief notice about the MSIA has been astounding: within one day of my sending
out 581 announcements just to my own personal correspondents, we had already received several
applications and dozens of requests for more information. Since there are only 15 slots in the
first cohort due to start September 3rd, we are confident of a spectacular start to our new
program. We plan to have at least two 15-person cohorts starting in January 2003.

I believe that our curriculum’s management orientation, the intense focus on practical knowledge
through in-depth analysis of each student’s own organization, and our commitment to provide
the best possible support to our students will make the Norwich MSIA a significant contribution
to IA education. We will also be working with professional certification organizations to make
sure our graduates can quickly acquire such certifications through on-campus examinations
during their two-week stay on campus at the end of the 18-month program.

To learn more about the MSIA, visit the Website at http://www.norwich.edu/MSIA, or call the
New Business Initiatives office at 1-800-468-6679.

* * *

NEW! 18-month online Master of Science in Information Assurance offered by Norwich
University; see <http://www.norwich.edu/msia> for full details.

bookstore or from Amazon at: <http://www.amazon.com/exec/obidos/ASIN/0471412589/tag=fusion0e>

M. E. Kabay, PhD, CISSP is Associate Professor in the Department of Computer Information
Systems at Norwich University in Northfield, VT. Mich can be reached by e-mail at <mkabay@compuserve.com>;

Copyright © 2002 M. E. Kabay. All rights reserved.

Permission is hereby granted to Network World to distribute this article at will, to post it without
limit on any Web site, and to republish it in any way they see fit.