



DEPARTMENT OF THE ARMY
UNITED STATES MILITARY ACADEMY
WEST POINT, NEW YORK 10996

July 24, 2012

REPLY TO
ATTENTION OF

Department of Electrical Engineering
and Computer Science

Terminal Degree Study Selectees
Department of Electrical Engineering
and Computer Science
United States Military Academy
West Point, New York 10996

Congratulations! I'm delighted that you have been selected for PhD studies and appointment to the faculty of the Department of Electrical Engineering and Computer Science at West Point, the United States Military Academy. I deeply appreciate your decision to commit five or six years of your Army time to cadets and the EECS mission. Your talents, abilities and energy are our most important resources. The Department is blessed to draw from the Army's top officers possessing academic prowess, technology expertise, and exemplary leadership. Your selection is a mark of distinction of which you ought to be proud. You will be joining one of the finest undergraduate faculties in the world. There is no better way to serve the Army and your own professional development than through the experience you are about to begin. I am looking forward with greatest anticipation to working with you as a member of our EECS family. In order to begin to know us, I ask you to read our web site carefully. Start with the general information about the department at <http://www.eecs.usma.edu/hq/eecs.htm>.

What follows is my guidance on how to proceed. My intent is for you to have a rewarding, enjoyable experience at school while preparing to be an exceptional educator during your future EECS faculty tour.

Seek acceptance at the best graduate program where you can be successful in the time allotted. You owe this to the Army and your future students. Your mission is to earn a high quality PhD in three years, even though most non-Army students take more. This is difficult, especially in our disciplines. Since late completion has negative consequences for you and the Department, all your decisions must be directed toward finishing on time. Your choices of institution and advisor are important. Identify one or two areas of study that are exciting to you. Then seek out high quality programs where work in your area(s) is currently producing graduates. Communicate carefully with people in each program. Your goal is to establish whether you will fit, both academically and personally. Explain your situation as a full-time, fully funded student who will work as hard as necessary to be finished within three years. Ask explicitly if this is possible. Furnish your Masters transcripts so that transfer credit opportunities can be identified. Listen carefully to feedback from all who could have a role in your success. Look for show stoppers. Try hard to identify your advisor and determine potential core members of your dissertation committee even before you apply. Start reading articles in the literature in your chosen field. We may be able to help with electronic library access.

The Army requires you to find at least one low-cost school option. This is normally easy to do. Some great schools are also low in cost, especially for residents of the respective state. Location close to extended family and other personal concerns can play a role in your choices, but they cannot be overriding. Your top priority must be finding the best degree program to complete your Ph.D.

You are required to receive approval of your degree title and plan from your EECS Program Director before committing yourself to a course of action in school. We have added this requirement for two newly emergent reasons. First, our disciplines are growing very broad. (They have always been deep.)

Second, many Ph.D. programs have reduced or eliminated their qualifying examination processes, which required each candidate to achieve a good level of knowledge across an entire discipline. The consequence of both trends is that individual Ph.D. experiences are growing narrower. Yet I count on our Ph.D.'s for teaching flexibility; i.e., that you will be able to teach many courses across your disciplinary slice of our curriculum. For this purpose, we must verify that your plan has sufficient overlap with our teaching requirements. My intent is that we will put the minimum necessary constraints on your choices.

Intermediate Level Education (ILE) by distance learning is an option for some. If this describes you, consider it a requirement to have ILE complete before you start Ph.D. studies. Meshing ILE work with the duties of a field assignment with may be difficult. Meshing it with a dissertation will be more so. Again, our concern is for your ultimate success.

Graduate school ought to be a wonderful, joyous time of discovery and growth. Take advantage of it! However, prepare to feel some stress. You'll normally be operating outside the Army community, including the rich support systems we take for granted. Your Army jobs usually put the lives of others in your hands. Responsibility for them drives you forward. Graduate school is different. Rather than responsibility for others, it's about personal development and discipline. You'll be surrounded by great colleagues who nonetheless do not rely on you; they'll have lives and goals quite different from your own. In addition, you will be taking up academic work for the first time in years. If you have recently returned from deployment, there will be added stresses. Post-traumatic stress may manifest. All this can be disorienting, sometimes extremely so. Expect your first semester or quarter to be a time of adjustment. Work hard, but do not over-schedule. Allow time to adapt to your new way of living and working. Your mental health is all-important. Just as you would go to the doctor for help with the flu, if adjustment to school or any other matter is causing you to feel unwell, it's your duty to seek out help. If you are not clear about how to do this, ask the Community Mental Health office at Keller Hospital here at West Point, <http://kach.amedd.army.mil>.

Quickly devise a complete plan and schedule that will take you to successful graduation. Planning is much simpler if you already have an advisor. Coursework and qualifying exams will be your milestones and dissertation defense the final goal. Establish firm expectations early, including your own: You are to complete a workmanlike dissertation on time. Larger projects can wait. Your school or advisor may prefer an open-ended approach, but this is not an option for you. Think strategically. Much hinges on your dissertation topic decision. A topic tied to extensive implementation work may be infeasible to complete on time. Purely theoretical topics carry some risk that no significant new result exists in your area; PhDs are not often awarded for negative results. If you choose an area where rapid advances are occurring, your work is more likely to be scooped by someone else. Choose your committee carefully. Important information often comes from fellow students. The typical profile of a good advisor is a tenured faculty member with a good reputation for accessibility and fostering teamwork among his or her PhD students, graduating them in reasonable time, admired as a scholar, and not scheduled for sabbatical. Understand your environment. Take positive steps to ensure a collegial relationship among all your committee members. Strive for each committee member to "buy in" to the approach you are taking. Communicate with them early and regularly. You should normally focus on meeting coursework requirements as quickly as possible while also exploring topics, building your committee, and creating a specific research plan. Your approach should be to reserve as much time as possible for dissertation research and writing. These invariably take longer than initial estimates.

Keep us up to date. Submit the required reports to the S1/Recruiting officer and Human Resources Command, but also stay in touch with your program director through email or phone calls a few times each year. We want to know how you are doing and help you succeed.

I have some final words for those who will be in the zone for colonel promotion while at West Point. There are some facts you must accept about both your position and mine as a senior rater. First, Ph.D. studies will have taken you away from a typical career track, including deployed service, for at least three

years. While as a department, our O-6 promotion rate has exceeded the Army average over time, recent boards have received guidance to give weight to deployed time. You must accept that your odds will have been affected. Second, my ability to affect boards' perspective on a fresh Ph.D. is low in the first year. During this time, your primary duty is to engage our mission as a faculty member. Even if you've been at West Point before, this is formidable work, and deeply important. It is nonetheless difficult for boards to grasp the complexity and level of responsibility. In subsequent years, you'll have opportunities to contribute at Academy, Army, DoD, and National levels by taking initiative through leadership, service, research, and outreach that are normally inaccessible in the first year. At that time your Ph.D. will provide ways to make unique contributions that few other officers can match. This is where I must focus my top reports. Finally, all EECS officers have ACOM files; over half are top 10%. You are in terrific company—the best aspect of an EECS tour. It also makes profile management my hardest job. The good news is that boards understand our position. We are like Ranger battalions and Lake Woebegone: "All the children are above average." Be assured that I balance all the above and many other factors in communicating your story to promotion boards.

Again, welcome to the EECS team! We have the best mission in the world, preparing the Army's future leaders by providing them with the best possible education in our technology disciplines. I hope you share the excitement and happiness that we feel every day. We're devoted to supporting your preparation to join us, and we are all looking forward to that event!

Sincerely,

A handwritten signature in black ink, appearing to read "Eugene K. Ressler". The signature is fluid and cursive, with a large initial "E" and "R".

Eugene K. Ressler
Colonel, U.S. Army
Professor and Head of Department