Lifelong Learning Requirement for Senior Capstone

The following text is a required assignment for every EE student in ENGR 490, Senior Capstone. Note that all students must take this class.

ENGR 490
Senior Capstone
Lifelong Learning

You will soon finish your training in Electrical Engineering and enter into a professional career which the faculty of EWU hopes you will find satisfying and rewarding. However, we also hope this will not be the end of your learning experience.

It will not be long before you face new technical and non-technical challenges in your career. You will be most successful if you embrace these new challenges through additional training, professional certifications, and advanced degrees. You may find that to take the next step, it is necessary to change career focus or seek a new employer.

This assignment will give you an opportunity to survey the range of options for lifelong learning, and collect the results in a form that you can refer to in the years to come.

Here are four categories of lifelong learning activities and a few specific possibilities in each category.

- **Professional Societies:** IEEE and ACM etc… Membership in these organizations will provide you with a window into the state of the art, including technical and business trends. You will also have access to training, conferences, certifications and other resources for gaining knowledge in areas of specialization and new technology.

- **Professional certifications:** The Professional Engineer (PE) certification is just one of the certifications you might strive for. There are certifications in Project Management, Computer Software or Networks, Quality Control, etc…. These credentials and the additional training they might require will show employers that you are serious about your field of study, and continuing to learn and grow.

- **Masters Degree:** You may find that your career eventually demands a deeper understanding of the underlying concepts, which you can gain through a Masters degree in an engineering field or an MBA.

- **Career Focus:** You may eventually find that a change to a different company or career focus is necessary in order to achieve your career objectives. You may discover that you want to move into management,
education, small business, etc. You should have an idea of “what all is out there” as you move forward in your career.

These are just a few of the possibilities, and they are not meant to limit your options, but to give you an idea of where to start.

You probably have some ideas about where your career is headed. For instance, you might be positive that you never want to get an advanced degree, but you would be interested in becoming involved in a particular professional society, or gaining a certain certification. Maybe you know you eventually want to start a small business or design next generation electronics products.

This is your assignment:

- Consider your aspirations, interests and career objectives.
- Utilize internet, library, career fairs, and other resources to learn more about professional societies and organizations, certifications, masters degrees and career focuses that will help you achieve your goals. For instance, if you intend to become a PE, you may want to include research about the requirements and milestones for this certification. Obtain at least some information that is of interest to you in each of these four categories.
- During your research, find several position postings that describe the type of job you would like to be doing 10 years from now. Using these to guide you, write your Future Job Description.
- Write a Lifelong Learning Summary describing your career objectives, some of the various resources and learning opportunities you discovered that were most interesting to you, and how they would help you get where you want to go. This summary should be at least one page, double-spaced.
- Update your Resume, or develop a Resume if you have not already done so.
- Write a cover-letter for a position you are currently seeking, or are interested in seeking.
- Write a one page (single space) essay about experiences/activities that during your academic career made you realize and appreciate the importance of lifelong learning.
- Build a Lifelong Learning Binder. Collect the information you found, along with your Resume, Future Job Description, Lifelong Learning Summary, and the Lifelong learning Essay. Place this material in a binder, with neatly labeled dividers between sections. You will keep this binder as a resource as you move forward in your career.
- Prepare for a job interview. At the end of the course, representatives from industry will conduct practice interviews with each student.

Don’t worry – this is only an exercise, and your career direction is not set in stone. But you will gain from it a greater awareness of the options available to you with an Electrical Engineering degree.