

Cooperative Graduate Degree Program at Fort Leonard Wood



By Dr. William J. Daughton

A cooperative degree program between the University of Missouri-Rolla and the United States Army Engineer School at Fort Leonard Wood leads to a graduate certificate in military construction management and to a master of science degree in engineering management, civil engineering, geological engineering, or public policy for officers in the Captain's Career Course.

In 1994, the University of Missouri-Rolla (UMR) and the United States Army Engineer School began a program of intensive study taught by UMR faculty at Fort Leonard Wood that allowed officers attending the Captain's Career Course to earn university graduate credit leading to a certificate in military construction management and then to a master's degree in engineering management. The program was established with a special tuition rate that makes it quite competitive and affordable. The first group of students completed this program in the spring semester of 1995, and since its inception, 881 officers have successfully completed their master's in engineering management through this program.

With the success of the program in engineering management, other degree programs were added in civil engineering, geological engineering, environmental engineering, and public policy. The program in public policy is supported by faculty from the Public Policy Administration Department at the University of Missouri-St. Louis (UMSL). Engineering management has been the most popular program by far, but all of the programs have been successful. The Fort Leonard Wood program is supported on-site by two UMR staff members to facilitate matriculation and completion of the program. All of the UMR programs are integrated into the Army's new web-based tuition assistance program *GoArmyEd* at <http://GoArmyEd.com>.

Program Structure

Military Construction Management Certificate

All officers entering the Captain's Career Course complete a core of four shared-credit courses that are a combination of instruction provided by Engineer School instructors and UMR faculty. Each course is worth 3 semester hours of graduate credit, resulting in the student accumulating 12 semester hours

of graduate credit during the 20-week career course. The shared-credit courses are as follows:

- Engineering Management 313, Managerial Decision Making
- Engineering Management 314, Management for Engineers and Scientists
- Civil Engineering 345, Construction Methods
- Civil Engineering 442, Construction Administration, Planning, and Control

Upon completing these courses, students in engineering management, civil engineering, and environmental engineering receive a graduate certificate in military construction management. Public policy and geological engineering students earn 12 credits, but not a certificate.

Master's Degree

Completion of the graduate certificate in military construction management with a grade of B or higher in each course enables students to enter the master's program in engineering management without taking the Graduate Record Examination (GRE), provided they meet the normal requirements for their undergraduate degree field and cumulative grade point average. Students entering the master's program in the other fields are still required to take the GRE. Once admitted, students then complete the remaining six courses in one equivalent semester. The format of those remaining courses varies, depending on the program.

In engineering management, which is the most popular option, the courses are either taught in two 8-week compressed sessions at Fort Leonard Wood, or on the UMR campus in the normal 16-week semester. The determining factor is the alignment of the Captain's Career Course with the standard UMR semesters. There are four career course groups spread throughout each year, and typically two of them dovetail with the UMR semesters, and two do not. In the first case, students take the remaining courses on the UMR campus with the normal assembly of graduate students. In the latter case, engineering management instructors teach the remaining six courses exclusively to the officers at Fort Leonard Wood in two 8-week sessions. Civil engineering is only offered twice per year to those in career course classes that line up with the

UMR semesters; public policy courses are taught at Fort Leonard Wood only; and the geological engineering courses are taught on the UMR campus.

Program Feedback

The overall feedback from the participants is positive; they cite this cooperative program as an excellent way to earn a master's in an otherwise busy time. In particular, the UMR support staff on-site receive positive feedback for their helpfulness, easy availability, and positive attitude. The program also draws high praise from the participating faculty as well. Most faculty members view the officers as very motivated and engaged students, and they consider it a pleasure to teach them. The faculty members describe these students as among the very best graduate students they encounter. This creates a winning combination and contributes to a very productive and exciting learning environment.

The Future

Both UMR and the Engineer School consider this program to be very valuable. For UMR, the program represents an important extension activity in fulfilling its mission to provide outstanding engineering education in the state. The Engineer School values the opportunity to engage a highly rated university in a cooperative program that has real benefit for its officers. Representatives of both groups continue to meet to discuss how the program is working and seek ways to improve it. One of the more recent improvements has been the introduction of an option to complete the degree program remotely. With the continuing growth of the distance education capability at UMR, the option now exists for officers to complete the master's program at a distance if they are required to leave before completing all of the courses. As communication technology continues to advance, this option will get easier to use regardless of the officers' location.

Questions about this program may be addressed to Lahne Black at 573-341-4410 or at <lahne@umr.edu>. 

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