MODERN ENGINEERING LEADERSHIP, GRADUATE CERTIFICATE

The Graduate Certificate in Modern Engineering Leadership is designed to help engineering and computer science professionals gain the skills and knowledge to become leaders in their organizations. It builds on prior training in engineering and computing with required courses in management of people and projects and in data analytics (multivariate statistics and machine learning). The program's underlying philosophy is that *modern* engineering leadership is both about leading people and about making decisions based on data. Certificate students also take an elective course in a technical topic of their choosing.

The Graduate Certificate in Modern Engineering Leadership is a fully online program in order to provide convenient access to working professionals.

Admission Requirements

Application Deadlines

Application deadlines vary by program, please review the application deadline chart (http://uwm.edu/graduateschool/program-deadlines/) for specific programs. Other important dates and deadlines can be found by using the One Stop calendars (https://uwm.edu/onestop/dates-and-deadlines/).

Admission

The minimum GPA for admission is 2.75 in the prior bachelor's or post-baccalaureate degree. Applicants should generally have a prior degree in engineering or computer science. Applicants with other prior degrees will be considered via holistic assessment of the academic record and professional experience, with a focus on substantial work experience in the engineering or computing fields and on adequate mathematics preparation for the required coursework.

Credits and Courses

Code	Title	Credits
Required Courses		
EAS 710	Managing Human Resources and Teams	3
IND ENG 890	Advanced Topics in Industrial and Systems Engineering:	3
IND ENG 716	Engineering Statistical Analysis	3
COMPSCI 411G	Machine Learning and Applications	3
Electives		
Electives may be taken in any topic taught by the College of Engineering and Applied Science.		3
Total Credits		**15**

Additional Requirements

Transfer Credit

No more than 20% of the required credits may be taken at an institution other than UWM. These courses are subject to Graduate School transfer policy and must be approved by the director of the certificate program.

Grade Point Average Requirement

A minimum cumulative 3.00 grade point average in certificate courses taken at UWM is required.

Articulation with Degree Programs

1. Credits and courses required for a certificate may double count toward meeting UWM graduate degree requirements subject to the following restrictions:
   - Degree programs must approve the courses from certificates that can double count toward the degree.
   - All credits taken in completion of certificate requirements may count towards a UWM graduate degree as long as they do not contribute more than 90% of the total credits needed to obtain the degree. (Note: Students in PhD programs must still complete the minimum residency requirements)
   - Certificate courses used toward meeting degree requirements must be completed within the time limit for transfer credit.
2. Courses completed for a degree may be counted toward a subsequent certificate, subject to all certificate policy requirements.
3. A course may count toward no more than one certificate and one degree.
4. Students may not earn a certificate subsequent to a concentration in the same area.

Time Limit

Certificate program time limits shall be established as follows:

- 18 or fewer credits/Three years from initial enrollment in the certificate sequence.
- 19 or more credits/Four years from initial enrollment in the certificate sequence.

For certificates that are designed as add-ons to degree programs and are awarded concurrent with the degree, the time limit shall be the same as that of the degree program.