

# Dual Degree: Master of Business Administration & Master of Science in Engineering - Civil & Environmental Engineering

## Plan Description

This is a dual degree offered by the Lee Business School in conjunction with the Howard R. Hughes College of Engineering.

The Lee Business School MBA Programs at UNLV is designed for those who seek global career and leadership opportunities. The world is changing quickly and today's business leaders are faced with new challenges in a complex business environment supported by new communication technologies and organizational structures. Success in the new global marketplace requires teams of executives working across functions and across borders.

The MBA programs at UNLV prepare students to succeed in today's business environment by providing them with the needed skills, knowledge, and tools to become visionary and creative leaders. The program focuses on ethics and critical thinking, business communications, the role of the firm and its goals and markets, firms' strategic planning and positioning, supply chain management, international business culture, information technology, leadership, and teamwork. Our faculty and administration are committed to fulfilling the recently revised college mission: to advance the knowledge and practice of the disciplines that constitute business and administration and to foster the intellectual and economic vitality of Nevada and the Intermountain Region through teaching, research, and outreach. Our faculty are committed to continuous quality improvement of the curriculum. To achieve the best outcome, the faculty embrace no single teaching method, but rather employ a combination of methods best suited to the particular objectives of the course. Lectures, group discussions, seminars, case studies, computer simulations, and individual and group research projects are frequently used within courses and across the curriculum.

The Department of Civil and Environmental Engineering and Construction (CEEC) at UNLV offers a number of program degree options leading to the Master of Science in Engineering (M.S.E.) - Civil and Environmental Engineering. Specific areas of engineering that are currently available include Construction, Geotechnical, Structural, Transportation, and Water Resources/Environmental.

## Plan Admission Requirements

Application deadlines

Applications available on the UNLV Graduate College website.

The admission requirements for the dual degree are the same as those stated under the original programs linked below:

- MBA
- MSE CEE

See the Application Process section under the MBA and MSE CEE programs linked above.

Applications will be reviewed by representatives of both Lee Business School and CEEC department, in an independent process within each college.

Applicants must be admitted to both Lee Business School and CEEC department to qualify for the dual degree program for that term. If denied by one program, the applicant will have the option of proceeding with a single degree program with departmental approval.

All domestic and international applicants must review and follow the Graduate College Admission and Registration Requirements.

Students are accepted into a degree program as described in the Graduate Catalog.

## Plan Requirements

Total Credits Required: 60

## Course Requirements

**Total Credits Required for the Business Administration M.B.A.:  
30**

### MBA Core Required Courses – Credits: 18

MBA 761 Accounting for Managers	3
MBA 763 Leadership, Teams, and Individuals	3
MBA 765 Financial Decision Making	3
MBA 767 Market Opportunity Analysis	3
MBA 769 Applied Economic Analysis	3
MBA 775 Data Modeling and Analysis	3

### Electives – Credits: 9

Complete 9 credits of electives from any 700-level course offered by the Lee Business School.

### Capstone Course – Credits: 3

MBA 787 Strategic Management	3
------------------------------	---

## Total Credits Required for the Master of Science in Engineering - Civil & Environmental Engineering: 30

### Elective Courses - Credits: 27

Students must successfully complete a minimum of 3 courses from one of the five categories in the following discipline-based list, and complete the remaining credits with a choice of advisor-approved courses

#### Construction

CEE 609 Engineering Project Management	3
CEE 710 Modular Construction	3
CEE 720 Information and Sensing Technology in Construction	3
CEM 651 Construction Estimating	4
CEE 785 Construction Engineering Management	3
CEM 653 Construction Scheduling and Resource Optimization	3
CEM 751 Construction Cost Analysis and Estimating	3

#### Geotechnical

CEE 710 Modular Construction	3
CEE 731 Pavement Materials and Design	3
CEE 732 Advanced Foundation Engineering	3
CEE 736 Earth Slopes and Retaining Structures	3
CEE 737 Soil Dynamics and Earthquake Engineering	3
CEE 741 Design of Highway Bridge Structures	3
CEE 785 Construction Engineering Management	3
CEE 734 Advanced Soil Mechanics	3

#### Transportation

CEE 725 Freight Transportation	3
CEE 726 Railroad Operations	3
CEE 735 Earth Dams and Embankments	3
CEE 761 Transportation Demand Analysis	3
CEE 762 Operations Research Applications in Civil Engineering	3
CEE 763 Advanced Traffic Engineering	3

## Structure

CEE 741 Design of Highway Bridge Structures	3
CEE 744 Design of Prestressed/Post-Tensioned Concrete Structures	3
CEE 748 Advanced Design of Timber Structures	3
CEE 775 Seismic Response of Structures	3
CEE 780 Advanced Reinforced Concrete Structures	3

## Water Resources/ Environmental

CEE 704 Environmental & Water Systems	3
CEE 709 Numerical Methods in Mechanics	3
CEE 750 Urban Runoff Quality and Control	3
CEE 751 Water Reuse Principles and Design	3
CEE 754 Biochemical Wastewater Treatment Fundamentals	3
CEE 756 Advanced Waste Treatment Design	3
CEE 757 Engineering Modeling of Natural Systems	3
CEE 758 Air Quality Modeling	3
CEE 759 Mass Transfer in Environmental Systems	3
CEE 768 Applied Geographic Information Systems	4
CEE 755 Advanced Physicochemical Methods for Water Treatment	3

## (Optional) Graduate Internship Course - Credit: Maximum up to 1

Students engaged in Curricular Practical Training (CPT) must take CEE 792. The course can be taken maximum one time during their study. However, the credit will not be counted towards the degree.

CEE 792 Graduate Internship for Master in Civil Engineering and Transportation	1
--	---

## Project - Credits: 3

CEE 796 Design Project in Civil Engineering	1 – 3
---	-------

## Degree Requirements

The MBA degree requires a minimum of 30 credits of approved course work.

For the MBA, all requirements listed above must be completed successfully as defined by the Lee Business School and the Graduate College. All required courses are sequenced so students may acquire the tools and skill they need for success in the program.

- For the MSE in Civil & Environmental Engineering, the student's Advisor should be tenured or a tenure-track faculty member of the CEEC Department. An advisory committee is not required.
- For the MSE in Civil & Environmental Engineering, students must complete a minimum of 27 credits of approved graduate-level courses, out of which a minimum of 3 courses from one of the five categories in the discipline-based list provided above, and 3 credits of project work associated with the master's level project (CEE 796) with the outcome being a paper written for a specific indexed conference or journal.
- Out of 30 credits MSE related course work, at least 50% of the courses (600 and 700 level) within the total coursework must be from the College of Engineering.
- Out of 30 credits MSE related course work, at least 50% of the courses within the total coursework must be 700 level.
- Students must maintain a minimum grade point average of 3.00. A course in which a grade of less than C was earned will not be considered for use toward the degree.
- All requirements for the M.S.E. are met upon the satisfactory completion of the project, and the submission of a satisfactory project report to the Advisor.

## Graduation Requirements

The student must successfully complete the MBA capstone course.

Students cannot graduate from one portion of the dual degree until the requirements for both are met. Students must apply to graduate from both programs for the same semester.

The student must submit all required forms to the Graduate College as well as apply for graduation from both degrees up to two semesters prior to completing their degree requirements.