Vecellio Construction Engineering Management Program
Via Department of Civil and Environmental Engineering

2023-2024 MS-CE Course Requirements Check Sheet

						Credit Hours	Semester Offered
I - VCEMP Common Courses	*(7 credit hours required)* [1]						
CEE 5944	Seminar: Construction (CRN: 82439)					1	F
CNST 5074	Construction Professional Competencies[2]					3	F
CNST 5114	Leadership in Arch/Engineer/Const					3	F
II - Track-Specific Requirements							
Non-Thesis Track *(3 or 6 credit hours required)*				OR	**Thesis Track** *(10 credit hours required)*		
CNST 5214	Construction Company Mgmt	3	S		CNST 5084	Methods in Const Research[4]	3	S
CEE 5904	Project and Report[3]	3	F, S		CNST 5424	Construction Research Present[5]	1	F, S
					CEE 5994	Research and Thesis	6	F, S
III - CEE Electives	*(Minimum 15 credit hours, Maximum 21 credit hours; courses may not be offered every year)*						
CEE 4014	Estimating, Productivity and Cost Engineering[6]					3	F, S
CEE 5004	Adaptive Reuse and Redevelopment					3	S
CEE 5014	Facility Delivery & Financing Strategies					3	F[7]
CEE 5020	Infrastructure Policy					3	S
CEE 5024	Contract Administration & Claims Resolution					3	F
CEE 5034	Smart Sustainable Infrastructure					3	Not offered
CEE 5060	Built Environment Information Modeling and Processing					3	F
CEE 5074	Global Virtual Design & Construction					3	S
CEE 5080	Infrastructure Asset Management					3	S
CEE 5084	Information Technology in Infrastructure					3	F
CEE 5984	Construction Management Dynamics					3	F
CEE 5984	Engineering Project Controls					3	S
CEE 5974	Independent Study[8]					1-3	F, S
IV - Other Electives	*(Minimum 0 credit hours required)*						
CEE 5884	Legal Aspects of Civil/Construction/Environmental Engineering					3	F
Any 4000 or 5000 courses in the areas of Construction, Engineering, Business or Policy **approved by advisor**						3+	F, S

[1] Students without a sufficient background in CEM fundamentals may be required to take background supporting courses.

[2] Fall entrants should enroll in first semester, spring entrants should enroll in second semester.

[3] Not required for coursework-only exit option; enroll for 3 credits for P&R exit option.

[4] Thesis students must take CNST 5084 or an approved substitute.

[5] Pass/Fail option only, taken in final semester.

[6] Approval of supervising faculty required; student will need to request a force-add.

[7] Offered in Fall 2024

[8] Approval of supervising faculty required; must submit independent study form in accordance with departmental policy.

A PLAN OF STUDY must be submitted before completion of 15 hours of graduate coursework. Class waivers or variations from the Course Requirements must be approved by the Program

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VCEMP Subject Areas of Study

CEE Electives are identified in two subject areas: (1) Project Delivery & Management and (2) Infrastructure Development & Management.

Students interested how projects are planned, delivered, financed, modeled/simulated and managed should select at least three of five required electives in Section III of the check sheet from the "Project Delivery & Management" subject area.

Students interested in how infrastructure development and management are impacted by sources of capital, policies, societal aspirations such as sustainability and how infrastructure assets are managed should select at least three of five required electives in Section III of the check sheet from the "Infrastructure Development & Management" subject area.

Project Delivery & Management Subject Area Electives
CEE 5014 Facility Delivery & Financing Strategies
CEE 5024 Contract Administration & Claims Resolution
CEE 5060 Built Environment Information Modeling & Processing
CEE 5074 Global Virtual Design & Construction
CEE 5984 Construction Management Dynamics
CEE 5984 Engineering Project Controls

Infrastructure Development & Management Subject Area Electives
CEE 5004 Adaptive Reuse and Redevelopment
CEE 5014 Facility Delivery & Financing Strategies
CEE 5020 Infrastructure Policy
CEE 5034 Smart Sustainable Infrastructure
CEE 5060 Built Environment Information Modeling & Processing
CEE 5080 Infrastructure Asset Management
CEE 5084 Information Technology for Infrastructure