Curriculum

Program Component	Courses	Credit
Program Core	2	6
Program Courses	4	12
Program Electives [1]	1	3
Masters Thesis [2]	3	9
Total	10	30

[1] Program Elective may be replaced by program course
[2] A student may replace Master's thesis with the following:
a. CIV598 Professional Project (3 credit hours); and
b. Program Elective (3 credit hours) and program course (3 credit hours)

Core Courses[1]

Course Code	Course Title	Cr.	Prerequisite(s)
CIV 502	Advanced Engineering Mathematics	3	Graduate Standing
CIV 509	Probability, Decision Theory, and Stochastic Processes	3	Graduate Standing
CIV 514	Engineering Research Methods and Communications	3	Graduate Standing

A student must take two courses out of the three core courses

Program Courses

Course Code	Course Title	Cr.	Prerequisite(s)	Course Code	Course Title	Cr.	Prerequisite(s)
CIV 503	Finite Element Analysis	3	Graduate Standing	CIV 515	Advanced Reinforced Concrete Design	3	Graduate Standing
CIV 516	Engineering Bridge Design	3	Graduate Standing	CIV 518	Pre-stressed Concrete Design	3	Graduate Standing
CIV 521	Advanced Foundations	3	Graduate Standing	CIV 511	Structural Dynamics I	3	Graduate Standing
CIV508	Durability, Monitoring, and Rehabilitation of Concrete Structures	3	Graduate Standing	CIV 522	Advanced Soil Mechanics	3	Graduate Standing
CIV 526	Slopes and Earth Dams	3	Graduate Standing	CIV 531	Urban Transportation Planning	3	Graduate Standing
CIV 534	Public Transportation	3	Graduate Standing	CIV 542	Groundwater Hydrology	3	Graduate Standing
CIV 544	Coastal Processes and Harbor Engineering	3	Graduate Standing	CIV 561	Construction Project Management	3	Graduate Standing
CIV 589	Advanced Civil Engineering Materials	3	Graduate Standing				

Elective Courses

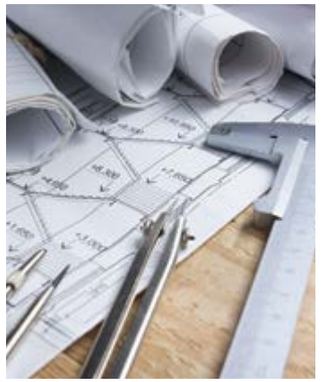
The following is a partial list of available elective courses. Students select one elective course if pursuing the thesis option of the master's degree or two electives otherwise.

Course Code	Course Title	Cr.	Prerequisite(s)	Course Code	Course Title	Cr.	Prerequisite(s)
MEM 504	Quality Engineering	3	Core Courses Completion	MEM 506	Operations Research & Simulations	3	Core Courses Completion
ARC 620	Efficient Building Systems	3	Core Courses Completion	ARC 630	Passive Design Strategies	3	Core Courses Completion
ARC 635	Professional Responsibility in Sustainable Environmental	3	Core Courses Completion				

MASTER OF SCIENCE IN

CIVIL ENGINEERING

جامعة أبوظبي
Abu Dhabi University
College of Engineering



Program Overview

The Master of Science in Civil Engineering (MSCE) at Abu Dhabi University is offered by the College of Engineering (COE).

Professional civil engineering practice nowadays is more demanding than ever, with distinction expected of professionals who are seeking better opportunities. A master's degree in civil engineering provides opportunities for advancement in professional practice. Graduate courses prepare students to tackle today's complex civil engineering problems related to the design of buildings, bridges, tunnels and foundations, solid and liquid waste treatment facilities, canals and ports, roads and highways, and modern transportation systems.

The program requires the completion of seven graduate-level courses (21 credit hours), in addition to a master's thesis (9 credit hours) or nine graduate-level courses (27 credit hours) and a professional project report (3 credit hours). The program accepts students with a Bachelor in Civil Engineering or a related field. Students who do not have a background in specific civil engineering subdisciplines may be admitted conditionally, subject to taking some undergraduate-level courses.

Student's Testimonial

THE COURSE PROVIDED ME WITH VARIOUS VALUABLE SKILLS THAT BENEFITED ME WITH MY CAREER

Eng. Abdalla Shaat - Alumnus, MSc. Civil Engineering

I came here as student filled with goals and aims willing to do, wishes and ambitions willing to succeed, and Abu Dhabi university helped me in to understand and assess real-world problems, proffesional career work, concepts and possible solutions through the course of Master of Civil / Structural Engineering.

The course provided me with various valuable skills that benefited me a lot when progressing with my career as a Structural Bridge Engineer working in Bilfinger Tebodin Middle East and dealing with main govenrment stakeholders such as Department of Municipalities and Transport (DMT), Abu-Dhabi, Al-Ain, Western Region Municipalities and MUSANADA as Supervision Consultant.

Career Prospects

A master's degree highlights the readiness of the graduate to lead in all aspects of the civil engineering profession. In addition, a master's degree is often a major step toward careers in academia where you have the best opportunity to transfer your knowledge to future generations. Graduates with the MSCE degree are sought after locally and internationally where new civil engineering projects are being designed and built to support economic development and enhance the wellbeing of society.

This program was introduced to Abu Dhabi University in response to the market needs of the UAE, where civil engineers are leading the design, construction, and environmental industries and where advanced, sustainable engineering solutions are critical.