

B.S. in Architecture and M.S. in Civil Engineering

The New Jersey School of Architecture and the Department of Civil and Environmental Engineering have established a dual degree program that permits students to obtain a B.S. Arch. and a Master of Science (M.S.) in Civil Engineering with a concentration in construction engineering and management. There is no reduction in the degree requirements for the professional degree in architecture. The dual degree program permits students to obtain an M.S. in Civil Engineering in substantially less time, in some cases with only one additional year of study.

All bridge courses are required. All students in this dual-degree program must take MATH 112 and 105 or equivalent courses. Equivalency for courses taken at other institutions is determined by NCE Graduate Advisor.

Up to 6 credits of graduate-level coursework may be applied to both the B.S. Arch. and M.S. Students may take additional courses at the graduate level during their undergraduate career, up to a maximum of 21 credits, but no additional graduate courses beyond the first 12 credits can be counted toward the undergraduate degree requirements and students are charged at the graduate course rate.

All prerequisite courses must be completed prior to taking bridge courses. All bridge courses must be completed prior to taking CoAD graduate courses counting toward both degrees. All CoAD graduate courses counting toward both degrees must be taken before taking any NCE graduate courses counting only toward the MSCE. The BS Arch degree must be completed before formal admission to the MSCE. No more than a total of 21 graduate credits (12 counted toward both degrees, 9 counted only to the graduate degree) may be taken prior to completion of undergraduate degree. The program requires at least one semester of full-time study as a graduate student, following completion of undergraduate degree.

Eligible students should contact the Office of Graduate Studies in their junior or third year regarding the process for admission to the dual degree program. The Office of Graduate Studies will coordinate the process with the undergraduate program director in the School of Architecture and later with the graduate advisor and the Office of Graduate Admissions as the student nears completion of the undergraduate degree. In order to be eligible for initial and continued participation in the dual degree program, the student must maintain a 3.0 cumulative GPA and take the GRE during the senior or final undergraduate year.

B.S. in Architecture Requirements

First Year

1st Semester		Credits
ARCH 195	Architecture Studio I	4
ARCH 110	Tools and Techniques I: Introduction to Architecture Thinking	3
ENGL 101	English Composition: Introduction to Academic Writing	3
CS 104	Computer Programming and Graphics Problems	3
MATH 107	University Mathematics A	3
FYS SEM	First-Year Student Seminar	0
Term Credits		16

2nd Semester

ARCH 196	Architecture Studio II	4
ARCH 156	Tools and Techniques II: Introduction to Architecture Making	3
ENGL 102	English Composition: Introduction to Writing for Research	3
MATH 105	Elementary Probability and Statistics	3
Social Sciences GER (http://catalog.njit.edu/undergraduate/academic-policies-procedures/general-education-requirements/social-science-ger/)		3
Term Credits		16

Second Year

1st Semester

ARCH 295	Architecture Studio III	4
ARCH 210	History of Architecture I	3
ARCH 223	Construction I	3
PHYS 102	General Physics I	3
PHYS 102A	General Physics I Lab	1
Term Credits		14

2nd Semester

ARCH 296	Architecture Studio IV	4
ARCH 211	History of Architecture II	3
ARCH 224	Construction II	3

Natural Science GER (http://catalog.njit.edu/undergraduate/academic-policies-procedures/general-education-requirements/natural-science-ger/)	3
History and Humanities GER 200 level (http://catalog.njit.edu/undergraduate/academic-policies-procedures/general-education-requirements/ger-200-level/)	3
Term Credits	16
Third Year	
1st Semester	
ARCH 395 Architecture Studio V	4
ARCH Elective	3
ARCH Elective	3
Free Elective	3
History and Humanities GER 300+ level (http://catalog.njit.edu/undergraduate/academic-policies-procedures/general-education-requirements/ger-300-level/)	3
Term Credits	16
2nd Semester	
ARCH Elective (Technology)	3
ARCH Elective	3
ARCH Elective	3
Free Elective	3
History and Humanities GER 300+ level (http://catalog.njit.edu/undergraduate/academic-policies-procedures/general-education-requirements/ger-300-level/)	3
Term Credits	15
Fourth Year	
1st Semester	
ARCH Elective (Technology)	3
ARCH Elective (History/Theory)	3
ARCH Elective	3
Free Elective	3
History and Humanities GER 300+ level (http://catalog.njit.edu/undergraduate/academic-policies-procedures/general-education-requirements/ger-300-level/)	3
Term Credits	15
2nd Semester	
ARCH Elective (History/Theory)	3
ARCH Elective	3
ARCH Elective	3
ARCH Elective	3
Term Credits	12
Total Credits	120

See the **General Education Requirements** for more information on electives.

Graduation is contingent upon the maintenance of a 2.0 average and the successful completion of the minimum credit requirement of prescribed courses within the select curriculum: Bachelor of Science in Architecture (B.S. Arch) requires 120 credits.

M.S. in Civil Engineering Requirements

Code	Title	Credits
Bridge Courses ¹		
CE 200	Surveying	
CE 200A	Surveying Laboratory	
CE 341	Soil Mechanics	
CE 341A	Soil Mechanics Laboratory (take as ARCH or FREE Elective in undergraduate program) *	
MATH 105	Elementary Probability and Statistics	
MATH 112	Calculus II	
ARCH 329		

ARCH 429	Advanced Structures	
OR		
MECH 320	Statics and Strength of Materials	
MATH 113	Finite Mathematics and Calculus I	
MATH 112	Calculus II	
PHYS 102	General Physics I	
Courses counted to both degrees (select two courses)		6
MIP 631	History and Theory of Infrastructure	
MIP 652		
MIP 655		
MIP 673	Infrastructure Planning in Practice	
MIP 675	Elements of Infrastructure Planning	
ARCH 569G	Professional Practice I	
ARCH 647	Visualizing Urbanism	
ARCH 649	Life Safety Issues in Contemporary Buildings	
ARCH 650	Economy Of Building	
ARCH 651	Public and Private Development	
ARCH 652	Architectural Project Management	
ARCH 663	Introduction to Sustainable Architecture	
ARCH 664		
ARCH 665		
ARCH 666		
Civil and Environmental Engineering Core Courses (required)		12
CE 610	Construction Management	
CE 611	Project Planning and Control	
CE 616	Construction Cost Estimating	
EM 632	Legal Aspects in Construction	
Elective Credits in Civil & Environmental Engineering		
Select four of the following:		12
CE 615	Infrastructure and Facilities Remediation	
CE 617	Historic Preservation	
CE 631	Advanced Reinforced Concrete Design	
CE 642	Foundation Engineering	
CE 702	Special Topics in Civil Engineering	
CE 644	Applied Engineering Geology	
CE 671	Performance and Risk Analysis of Infrastructure Systems	
CE 711	Methods Improvement in Construction	
ENE 662	Site Remediation	
ENE 671	Environmental Impact Analysis	
Total Credits		30

¹ Bridge courses are required as prerequisites for admission to the M.S. program. These courses may count as free electives in the B.Arch., but do not count toward the M.S.

* Prereq courses for CE 341 for B.S. Arch Students are MATH 112 & 105, ARCH 329 & 429