

College of Architecture and Urban Studies
Myers-Lawson School of Construction
Bachelor of Science: Building Construction

For students graduating in calendar year 2022 and for student date of entry under UG Catalog 2020-2021

131 credits required for degree

I.	Pathways for Liberal Education	45 cr hrs
II.	Degree Core Requirement	30 cr hrs
III.	Major Requirements	30 cr hrs
IV.	Track Requirements	26 cr hrs
	Total	131 cr hrs

I. Pathways to General Education (45 credit hours)

A. Discourse			E. Quantitative and Computational Thinking	
COMM 1015 Communication Skills	3	_____	MATH 1225 ⁴ Calculus of a Single Variable (5F) (C-)	4
or ENGL 1105 First Year Writing			ACIS 1004 Accounting Foundations (5F)	3
COMM 1016 Communication Skills Pre: 1015	3	_____	Choose any (5A) course	3
or ENGL 1106 First Year Writing Pre: 1105				
ENGL 3764 Technical Writing Pre: Jr Standing	3	_____		
B. Critical Thinking in the Humanities			F. Critique and Practice in Design and the Arts	
Choose any Pathways 2 elective	3	_____	Choose any 6A Elective	3
Directed Pathways 2 course ¹	3	_____	Choose any 6D Elective	3
C. Reasoning in the Social Sciences			G. Critical Analysis of Identity and Equity in the US	
ECON 2005 Principles of Econ OR	3	_____	Directed Pathways 7 course to be double counted with the Pathways 2 course ¹	
AAEC 1005 Econ Food Fiber Systems				
ECON 2006 Principles of Econ Pre: 2005	3	_____		
OR				
AAEC 1006 Econ Food Fiber Systems				
D. Reasoning in the Natural Sciences				
PHYS 2305 ⁴ Foundations of Physics I	4	_____		
Pre: MATH 1225				
GEOS 1004 Intro to Earth Science	3	_____		
and GEOS 1104 Intro to Earth Science Lab	1	_____		

¹ The following courses fulfill both Pathways 2 and 7 requirements. Please choose from: AFST 2204, AFST 2275, AFST 2276, AFST 2644, APS 1704, APS 2434, ENGL 2644, HD 1134, HIST 1115, HIST 1116, HIST 2104, HIST 2275, HIST 2276, HIST 3164, HUM 1704, RLCL 2124, RLCL 2204, SPAN 3564, WGS 2204

II. Degree Core Requirement (30 credit hours)

In accordance with State Council guidelines, courses used to fulfill the SCHEV approved degree core may not also be used to meet Pathways for Building Construction or major requirements.

BC	1214	Introduction to Building Construction I	3	_____
BC	1224 ⁴	Introduction to Building Construction II + Lab Pre: 1214 (C-)	3	_____
BC	2014	Construction Principles I Pre: 1224	3	_____
BC	2024	Construction Principles II Pre: 1214, 1224, 2014 or 4264 Co: 2064	3	_____
BC	2044	Buildings and Materials Pre: 2214 or CEM 2104 or CNST 2104	3	_____
BC	2064 ⁴	Integrated Construction Series I Pre: (2014, 2114) or 4264 Co: 2024 or ARCH 3045 or CEE 3014	3	_____
BC	2114 ⁴	IT in Design and Construction Pre: 1224 or CEM 2104 Co: 2014	3	_____
BC	3064	Intergrated Construction II Pre: (2064, 3114, PHYS 2305) or (3114, CEM 2104, PHYS 2305)	3	_____
BC	3114	Building Systems Technology Pre: (2024 or CNST 2104 or CEM 2104), PHYS 2305	3	_____
BC	4064	Integrated Construction III Pre: 3064	3	_____

III. Major Requirement (30 credit hours)

BC	2104	Building Effective Construction Teams Pre: 1224 or 4264, (COMM 1016 or ENGL 1106)	3
BC	2134	Construction Data Analysis Pre: MATH 1114	2
BC	2214 ⁴	Why Buildings Stand Up Pre: MATH 1225 or 1025	3
BC	3134	(CEM 3134) Temporary Structures Pre: (2044, 2024) or CEE 3684	3
BC	4164	Process Planning and Design Pre: 3114, 3064	3
BC	4434	Construction Practice I Pre: (2044, 3064) or 5264G or (5514 and 5154) or CEM 2104 Co: 4064	3
BC	4444	Construction Practice II Pre: 4434	4
CEM	3084	Construction Economy Pre: CEM 2104 or BC 2024	3
FIN	3054	Legal and Ethical Environment of Business Pre: Junior Standing	3
MGT	3304	Management Theory & Leadership Practice Pre: Sophomore Standing	3

IV. Choose 1 of the 5 tracks below to complete degree requirements. (26 credit hours)

Residential Construction and Development (RCD)

BC	2354	Residential Construction Technologies Pre: 2014	3
BC	4324	Innovation in Residential Construction Pre: 2024, 3114	3
BC	4374	Residential Housing & Land Development Pre: 2064, 3064. Co: 4064	3
MATH	1114	Elementary Linear Algebra	2
		Business & Management Elective ²	3
		Business & Management Elective ²	3
		Free Elective	3
		Free Elective	3
		Construction Elective ³	3

Structural Design (SD)

MATH	1226	Calculus of a Single Variable Pre: 1225	4
MATH	2204	Multivariable Calculus Pre: (1226)	3
ESM	2104	Statics Pre: MATH 1226	3
ESM	2204	Mechanics of Deformable Bodies Pre: ESM 2104 and MATH 2204	3
CEE	3404	Intro Structural Engineering Pre: ESM 2204 (C-)	3
CEE	3424	Reinforced Concrete Structures I Pre: (3404 (C-), (3684 (C-) or BC 2044)	3
CEE	3434	Design of Steel Structures I Pre: (CEE 3404 (C-), (CEE 3684 (C-) or BC 2044)	4
		Construction Elective ³	3

Sustainable Building Performance (SBP)

BC	3014	Building Physics & Environmental Systems Pre: PHYS 2305	3
BC	4314	Building Performance & Energy Management Pre: 3014	3
BC	4334	Sustainable Building Performance Management Pre: 3064, 3014	3
MATH	1114	Elementary Linear Algebra	2
		Business & Management Elective ²	3
		Business & Management Elective ²	3
		Free Elective	3
		Free Elective	3
		Construction Elective ³	3

Virtual Design Construction (VDC)

BC	4114	BIM in Design and Construction Pre: 2114	3	
BC	4124	Digital Construction & Manufacturing Pre: 2114	3	
BC	4364	Lifecycle BIM for Facility Management Pre: 2114, 3114	3	
MATH	1114	Elementary Linear Algebra	2	
		Business & Management Elective ²	3	
		Business & Management Elective ²	3	
		Free Elective	3	
		Free Elective	3	
		Construction Elective ³	3	

Directive Elective (DE) Track

Students pursuing double majors or minors may use courses from their other major for directed electives to build their own track as long as the courses are not building construction major requirements. Students must have a plan of study signed by the Department Head or Assistant Director of Student Affairs comprised of courses to form a focused area of study for this track.

		Business & Management Elective ²	3	
		Business & Management Elective ²	3	
		Department Approved Elective	3	
		Department Approved Elective	3	
		Department Approved Elective	3	
		Department Approved Elective	3	
		Department Approved Elective	3	
		Department Approved Elective	3	
MATH	1114	Elementary Linear Algebra	2	

²Business and Management Electives

AAEC	3324	Environment & Sustainable Development Economics Pre: 1005 or 1006 or Econ 2005	3	
AAEC	3454	Small Business Mgt & Entrepreneurship Pre: AAEC 2434 or ACIS 2115 or MGT 3064	3	
AAEC	4764	Real Estate Appraisal Pre: Junior Standing	Var 3 - 5	
ACIS	2116	Principles of Accounting Pre: 2115 (C-)	3	
ISE	4004	Theory of Organization	3	
MGT	2064	Foundations of Entrepreneurs	3	
MGT	2354	Leadership for Managers and Entrepreneurs Pre: Sophomore Standing	3	
MGT	3064	Cornerstones Entrepreneurship Pre: MGT 2064 and completion of 45 credit hours and two Area 5 courses	3	
MKTG	3104	Marketing Management Pre: Junior Standing	3	
MKTG	4734	Real Estate Marketing Pre: 3104, Junior Standing	3	
PM	2674	Multifamily Property Management and Operations	3	
UAP	2004	Principles of Real Estate (Cross-list REAL 2004)	3	

³Construction Electives

Students may choose a BC course outside of their track of study. (i.e. a VDC student may choose a BC course from the SBP track)

or

CEM	3064	Introduction to Lean Construction Pre: CEM 2104	3	
CEM	3074	Global Design and Construction for Sustainable Development Pre: Junior Standing	3	
CEM	3154	Smart Construction Pre: BC 2114	3	
CEM	4964	Field Work/Practicum	Var.	

Any other construction-related course must be approved by a BC advisor.

PLEASE READ ALL NOTES CAREFULLY:

Policy on Satisfactory Progress Toward a Degree:

University Policy 91 outlines university-wide minimum criteria to determine if students are making satisfactory progress toward the completion of their degrees. The Department of Building Construction fully supports this policy. Specific expectations for satisfactory progress for BC majors are as follows:

⁴Upon having attempted 72 credit hours (entering as freshmen) or 90 credit hours (entering as transfers), a student must successfully complete BC 1224, 2064, 2114, 2214, MATH 1225, PHYS 2305. Students who do not meet the requirements will be notified upon reaching 72 credit hours (or 90 credit hours for transfer students) that they must complete any missing courses before being allowed to continue into the Professional/Upper Level BC courses. (BC Professional/Upper Level courses are all 3000 and 4000 level BC courses.) Student will have two terms of enrollment to rectify any deficiencies. Failure to complete these pivotal courses within 2 semesters will result in student being required to transfer out of the major. This policy is strictly enforced.

GPA Statement: Graduation/GPA requirements to include: Each student must meet the minimum University-wide criteria as described in Policy 91 and summarized in the Undergraduate Catalog. In-major and overall GPA required to graduate is 2.0.

In-major GPA: consists of all courses under the BC designation.

Foreign Language Requirement: Minimum requirement may be met in high school by completing 2 units of a single foreign or classical language. Students who do not satisfy the foreign language requirement in high school may do so by taking six credits of college-level foreign language (classical language or American Sign Language). These six credits do not count toward the total minimum hours required of the declared degree program.

Prerequisites for courses are listed in the Undergraduate Course Catalog. It is the responsibility of the student to make sure the prerequisites for each course have been met. Students who enroll in a course for which they clearly have not satisfied the prerequisites or equivalent may be dropped from the course. Deliberate false statements testifying to the satisfaction of prerequisites constitute a violation of the honor code.

Statement of Hidden Prerequisites: Pre-requisites for each course are listed after the course title. The letter grade notation, such as (C-) indicates the minimum grade students must earn in the pre-requisite course. There are no hidden pre-requisites in this program of study.