

VIRGINIA TECH - CURRICULUM MAP | BS BUILDING CONSTRUCTION 2021 - 2022

ACCE Student Learning Outcome	BC 1214	BC 1224	BC 2014	BC 2024	BC 2044	BC 2064	BC 2104	BC 2114	BC 2134	BC 2214	BC 3064	BC 3114	BC 3134	BC 4064	BC 4164	BC 4434	BC 4444	Indirect	
	Intro I I R M A	Intro II I R M A	Prin I I R M A	Prin II I R M A	Materials I R M A	Integrated I I R M A	Cnst Teams I R M A	IT I R M A	Data Analysis I R M A	Bldgs Stand I R M A	Integrated II I R M A	Systems Tech I R M A	Temp Struct I R M A	Integrated III I R M A	Plnng Proc I R M A	Practice I I R M A	Practice II I R M A		
1 Create written communications appropriate to the construction discipline		I			I R	R					R	R					M A	R	1
2 Create oral presentations appropriate to the construction discipline						R	I R M A				R			R				R	2
3 Create a construction project safety plan				I R M A										R				R	3
4 Create construction project cost estimates			I R M	R M		R			I		R			M A		R		R	4
5 Create construction project schedules			I	R M		R		I			R			M A		R		R	5
6 Analyze professional decisions based on ethical principles	I					I	R M A			R			R						6
7 Analyze construction documents for planning management of construction processes						I		I	I		R	R		M A				R	7
8 Analyze methods, materials, and equipment used to construct projects			I R	I R	I R	R		I	I R		R	I		M A				R	8
9 Understand the role of the construction manager as a member of different multi-disc. project teams	I R M A					R	R												9
10 Apply electronic-based technology to manage the construction process	I					I		M A	R						R		R		10
11 Apply basic surveying techniques for construction layout and control	I		M A																11
12 Understand different methods of project delivery and the roles of all constituencies involved in the process	I	M A													R			R	12
13 Understand construction risk management		I	M A			R												R	13
14 Understand construction accounting and control						R			I R						I R		M A		14
15 Understand construction quality assurance and control	I		M A		R	R									R				15
16 Understand construction project control processes	I		M A			R									R				16
17 Understand the legal implications of contract & laws to manage a construction project																I R M A			17
18 Understand the basic principles of sustainable construction					I R M A														18
19 Understand the basic principles of structural behavior					R	I				M A									19
20 Understand the basic principles of mechanical, electrical, and piping systems											I R	I	M A						20

I = Introduce; R = Reinforce; M = Master; A = Assess/Direct or Assess/Indirect