

**Sample Roadmap - Course XB (there are alternative paths, of course, especially for labs and capstone!)**

First-semester Sophomore Entry, no advanced credits

Year 1 - Fall	Subject #	Subject Title	Units	GIR	Year 1 - Spring	Subject #	Subject Title	Units	GIR
		GIR Mathematics	12	CALC I			GIR Mathematics	12	CALC II
		GIR Physics	12	PHYS I			GIR Biology	12	BIO
		GIR Chemistry	12	CHEM			HASS (CI-H/CI-HW)	12	HASS, CI-H
		HASS	12	HASS		5.12	Organic Chemistry	12	REST
			48					48	
<b>Year 2 - Fall</b>		HASS	12	HASS	<b>Year 2 - Spring</b>		HASS (CI-H)	12	HASS, CI-H
	18.03	Differential Equations	12	REST		7.05	Biochemistry	12	Dept
	5.601	Thermo and Kinetics	6	Dept		10.213	Thermodynamics	12	Dept
	10.10	Intro ChE	12	Dept		10.301	Fluid Mechanics	12	Dept
		Unrestricted elective	6			7.002	introductory bio lab	6	Dept
			48					54	
<b>Year 3 - Fall</b>		HASS	12	HASS	<b>Year 3 - Spring</b>		HASS	12	HASS
	7.003	Institute lab	12	GIR/Dept/CI-M		10.37	Reaction Engineering	12	Dept
	10.302	Heat and Mass Transport	12	Dept		*	Department Laboratory	15	CI-M
		Unrestricted elective	12			7.03	Genetics	12	Dept
			48					51	
<b>Year 4 - Fall</b>		HASS	12	HASS	<b>Year 4 - Spring</b>		HASS	12	HASS
	10.x	Integ ChE Topic OR elective	6	Dept			GIR Physics	12	PHYS II
	10.492A**	Integ ChE Topic - capstone	6	Dept		10.490	Integ ChE - capstone	9	Dept
	7.06	Cell Biology	12	Dept			Unrestricted elective	12	
		Unrestricted elective	12				Unrestricted elective	6	
			48					51	

load 396  
less GIRs 192

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\* Department Laboratory choices: (fall) 10.28 (spring) 10.27, 10.29

\*\* ICE-T choices: (fall) 10.492A, 10.492B, 10.496 (IAP) 10.493 (spring) 10.494A, 10.494B

**Pre-Requisite Stack**

Subject	Pre-requisites
10.10	PHYS1, CHEM; 18.03 co-req
10.213	10.10, 5.601
10.301	10.10, 18.03
10.302	10.213, 10.301, 5.601
10.37	10.301, 5.601
10.28*	(5.07 or 7.05), LAB
10.27,9*	10.302, LAB
10.490	10.37
10.492,3,4	10.301