

SFC Engineering Curriculum: Scope & Sequence Framework

Pre-Playground	Playground	NIT	Novice Green	Novice White	Midget Green	Midget White	Junior Green	Junior White	Inter Green	Inter White	Seniors
Civil	Civil	Civil	Civil	Civil	Civil	Civil	Civil	Civil	Civil	Civil	Civil
Blocks	Blocks	Sandbox	Beach	Beach	Beach	Fluid Mechanics .3	Primitive Technologies	Survival Technologies	Bridging .3	Bridging .3	Survivor
Sandbox	Sandbox	Beach	Construction Lab .2	Construction Lab .3	Construction Lab .3	Surficial	Bridging .1	Bridging .2	Soils .2	Soils .2	Island
Beach Construction Lab .1	Beach Construction Lab .1	Construction Lab .2	Fluid Mechanics .1	Fluid Mechanics .2	Fluid Mechanics .2	Geology .1	Surficial	Soils .1	Terrain Analysis	Terrain Analysis	West Point
Pretend Play	Pretend Play	Pretend Play	Ingenuity Challenge .3			Erosion Lab	Geotechnical .2	Terrain Analysis	Structural Geology: Bearing	Surficial Geology .3	Construction .1
Sarah Lawrence Invitational	Ingenuity Challenge .1	Fluid Mechanics .1				Structural Geotechnical .1	Erosion Lab	Cal Tech Invitational	Capacity Lab .2	Rensselaer	Concrete & Timber
	Stanford Invitational					Bearing Capacity Lab	Ingenuity Challenge .7		Ingenuity Challenge .9	Polytechnic Invitational	Surficial Geology .3
						Ingenuity Challenge .5					Erosion Lab
Aerospace	Aerospace	Aerospace	Aerospace	Aerospace	Aerospace	Aerospace	Aerospace	Aerospace	Aerospace	Aerospace	Aerospace
			Model Aircraft Flight OPS	Model Aircraft Flight OPS	Model Making F-18	Rockets .1 Flight Lab	Rockets .2 Build & Flight Lab	Rockets .3 Ballistic Physics	Kites & Principles of Lift	Lighter Than Air Flight Lab	
					Survivability: Egg Drop Lab		MIT Invitational	West Point Invitational			
Chemical	Chemical	Chemical	Chemical	Chemical	Chemical	Chemical	Chemical	Chemical	Chemical	Chemical	Chemical
	Emulsions & Surfactants: Bubbleology Lab	Emulsions & Surfactants: Bubbleology Lab	Polymers Dr. Suess's Oobleck	Polymers Dr. Suess's Oobleck	Polymers Slime Lab .1	Polymers Penn State Invitational	Catalysis & Chemical Reaction	Catalysis & Chemical Reaction	Emulsions & Surfactants Lab		
			Non-Newtonian Fluidity Lab	Non-Newtonian Fluidity Lab							
Mechanical	Mechanical	Mechanical	Mechanical	Mechanical	Mechanical	Mechanical	Mechanical	Mechanical	Mechanical	Mechanical	Mechanical
							Hand Tools .1	Hand Tools .2	Hand Tools .3	Air Tools	Power Tools
							Rigging .1	Rigging .1	Rigging .2	Rigging .2	Rigging .3
Biological	Biological	Biological	Biological	Biological	Biological	Biological	Biological	Biological	Biological	Biological	Biological
							SAV .1 Univ. of MD Invitational	Aquaculture Oyster.1	Aquaculture Oyster.2	Aquaculture Oyster.3	Aquaculture Oyster.4
							SAV .2	SAV .3	SAV .4		
							Reforestaton	Reforestaton	Reforestaton		
Naval	Naval	Naval	Naval	Naval	Naval	Naval	Naval	Naval	Naval	Naval	Naval
	Bouyancy Lab .1	Bouyancy Lab .1	Bouyancy Lab .2	Bouyancy Lab .2	Bouyancy Lab .3	Bouyancy Lab .3	Boat Design & Construction	Boat Design & Construction	Naval Architecture US Naval Academy	Naval Architecture US Naval Academy	Cardboard Boat Races
		Ingenuity Challenge .2		Ingenuity Challenge .4		Ingenuity Challenge .6		Ingenuity Challenge .8	Invitational	Invitational	