

Bachelor of Science in Software Engineering

Model Full-Time Track - V3.2

Freshman Year	Q1	Q2	Q3	Junior Year	Q1	Q2	Q3
SE1011 Software Development I	3-2-4			SE3010 Software Development Laboratory I	4-0-4		
CH200* Chemistry I	3-2-4			SE3800 Software Engineering Process II	3-0-3		
MA136 Calculus for Engineers I	4-0-4			SE3821 Software Requirements and Specification	3-2-4		
GS1001 Freshman Studies I	4-0-4			CS3860 Introduction to Database Systems	3-2-4		
				OR402 Professional Guidance	1-0-1		
SE1021 Software Development II		3-2-4		SE3020 Software Development Laboratory II		2-2-3	
PH2011 Physics I - Mechanics		3-2-4		SE3810 Principles of Software Architecture		3-2-4	
MA137 Calculus for Engineers II		4-0-4		CS3840 Operating Systems		4-0-4	
GS1002 Freshman Studies II		4-0-4		MA3320 Discrete Mathematics II		3-0-3	
				Humanities/Social Science Elective		3-0-3	
CS2852 Data Structures			3-2-4	SE3030 Software Development Laboratory III			2-2-3
PH2021 Physics II - Electromagnetics			3-2-4	CS3851 Algorithms			3-2-4
MA231 Calculus for Engineers III			4-0-4	MA383 Linear Algebra			3-0-3
GS1003 Freshman Studies III			4-0-4	HU432 Ethics for Prof. Managers and Engineers			3-0-3
				Free Elective			3-0-3
Totals	14-4-16	14-4-16	14-4-16	Totals	14-4-16	15-4-17	14-4-16
	01	0.2			01	0.2	0.2
Sophomore Year	Q1	Q2	Q3	Senior Year	Q1	Q2	Q3
Sophomore Year SE2030 Software Engineering Tools and Practices	Q1 2-2-3	Q2	Q3	Senior Year SE400 Senior Design Project I	Q1 2-2-3	Q2	Q3
Sophomore Year SE2030 Software Engineering Tools and Practices CS2911 Network Protocols	Q1 2-2-3 3-2-4	Q2	Q3	Senior Year SE400 Senior Design Project I Technical Elective	Q1 2-2-3 3-0-3	Q2	Q3
Sophomore Year SE2030 Software Engineering Tools and Practices CS2911 Network Protocols MA2310 Discrete Mathematics I	Q1 2-2-3 3-2-4 3-0-3	Q2	Q3	Senior Year SE400 Senior Design Project I Technical Elective SE3910 Real-Time Systems	Q1 2-2-3 3-0-3 3-2-4	Q2	Q3
Sophomore Year SE2030 Software Engineering Tools and Practices CS2911 Network Protocols MA2310 Discrete Mathematics I Math/Science Elective Duringen Florting	Q1 2-2-3 3-2-4 3-0-3 3-0-3	Q2	Q3	Senior Year SE400 Senior Design Project I Technical Elective SE3910 Real-Time Systems Math/Science Elective	Q1 2-2-3 3-0-3 3-2-4 3-0-3	Q2	Q3
Sophomore Year SE2030 Software Engineering Tools and Practices CS2911 Network Protocols MA2310 Discrete Mathematics I Math/Science Elective Business Elective	Q1 2-2-3 3-2-4 3-0-3 3-0-3 3-0-3	Q2	Q3	Senior Year SE400 Senior Design Project I Technical Elective Technical Elective SE3910 Real-Time Systems Math/Science Elective Humanities/Social Science Elective	Q1 2-2-3 3-0-3 3-2-4 3-0-3 3-0-3	Q2	Q3
Sophomore Year SE2030 Software Engineering Tools and Practices CS2911 Network Protocols MA2310 Discrete Mathematics I Math/Science Elective Business Elective SE2811 Software Component Design	Q1 2-2-3 3-2-4 3-0-3 3-0-3 3-0-3	Q2	Q3	Senior Year SE400 Senior Design Project I Technical Elective Technical Elective SE3910 Real-Time Systems Math/Science Elective Math/Science Elective Humanities/Social Science Elective SE401 Senior Design Project II Senior Design Project II	Q1 2-2-3 3-0-3 3-2-4 3-0-3 3-0-3	Q2	Q3
Sophomore Year SE2030 Software Engineering Tools and Practices CS2911 Network Protocols MA2310 Discrete Mathematics I Math/Science Elective Business Elective SE2811 Software Component Design SE2840 Web Application Development	Q1 2-2-3 3-2-4 3-0-3 3-0-3 3-0-3	Q2 3-2-4 3-2-4	Q3	Senior Year SE400 Senior Design Project I Technical Elective Technical Elective SE3910 Real-Time Systems Math/Science Elective Humanities/Social Science Elective SE401 Senior Design Project II Technical Elective Technical Elective	Q1 2-2-3 3-0-3 3-2-4 3-0-3 3-0-3	Q2	Q3
Sophomore Year SE2030 Software Engineering Tools and Practices CS2911 Network Protocols MA2310 Discrete Mathematics I Math/Science Elective Business Elective SE2811 Software Component Design SE2840 Web Application Development CS2711 Computer Organization	Q1 2-2-3 3-2-4 3-0-3 3-0-3 3-0-3	Q2 3-2-4 3-2-4 4-0-4	Q3	Senior Year SE400 Senior Design Project I Technical Elective Technical Elective SE3910 Real-Time Systems Math/Science Elective Humanities/Social Science Elective SE401 Senior Design Project II Technical Elective Math/Science Elective	Q1 2-2-3 3-0-3 3-2-4 3-0-3 3-0-3	Q2 2-2-3 3-0-3 3-0-3	Q3
Sophomore Year SE2030 Software Engineering Tools and Practices CS2911 Network Protocols MA2310 Discrete Mathematics I Math/Science Elective Business Elective SE2811 Software Component Design SE2840 Web Application Development CS2711 Computer Organization Science Elective Science Elective	Q1 2-2-3 3-2-4 3-0-3 3-0-3 3-0-3	Q2 3-2-4 3-2-4 4-0-4 3-2-4	Q3	Senior Year SE400 Senior Design Project I Technical Elective Technical Elective SE3910 Real-Time Systems Math/Science Elective Humanities/Social Science Elective SE401 Senior Design Project II Technical Elective Math/Science Elective Math/Science Elective IE423 Engineering Economy Engineering Economy	Q1 2-2-3 3-0-3 3-2-4 3-0-3 3-0-3	Q2 2-2-3 3-0-3 3-0-3 3-0-3	Q3
Sophomore Year SE2030 Software Engineering Tools and Practices CS2911 Network Protocols MA2310 Discrete Mathematics I Math/Science Elective Business Elective SE2811 Software Component Design SE2840 Web Application Development CS2711 Computer Organization Science Elective Science Elective	Q1 2-2-3 3-2-4 3-0-3 3-0-3 3-0-3	Q2 3-2-4 3-2-4 4-0-4 3-2-4	Q3	Senior Year SE400 Senior Design Project I Technical Elective Technical Elective SE3910 Real-Time Systems Math/Science Elective Math/Science Elective SE401 Senior Design Project II Technical Elective Math/Science Elective Math/Science Elective IE423 Engineering Economy Humanities/Social Science Elective	Q1 2-2-3 3-0-3 3-2-4 3-0-3 3-0-3	Q2 2-2-3 3-0-3 3-0-3 3-0-3 3-0-3 3-0-3	Q3
Sophomore Year SE2030 Software Engineering Tools and Practices CS2911 Network Protocols MA2310 Discrete Mathematics I Math/Science Elective Business Elective SE2811 Software Component Design SE2840 Web Application Development CS2711 Computer Organization Science Elective Science Elective SE2040 Software Development III	Q1 2-2-3 3-2-4 3-0-3 3-0-3 3-0-3	Q2 3-2-4 3-2-4 4-0-4 3-2-4	Q3	Senior Year SE400 Senior Design Project I Technical Elective SE3910 Real-Time Systems Math/Science Elective Humanities/Social Science Elective SE401 Senior Design Project II Technical Elective Math/Science Elective IE423 Engineering Economy Humanities/Social Science Elective SE402 Senior Design Project III	Q1 2-2-3 3-0-3 3-2-4 3-0-3 3-0-3	Q2 2-2-3 3-0-3 3-0-3 3-0-3 3-0-3	Q3
Sophomore Year SE2030 Software Engineering Tools and Practices CS2911 Network Protocols MA2310 Discrete Mathematics I Math/Science Elective Business Elective SE2811 Software Component Design SE2840 Web Application Development CS2711 Computer Organization Science Elective Second Software Development III SE2040 Software Development III SE2800 Software Engineering Process I	Q1 2-2-3 3-2-4 3-0-3 3-0-3 3-0-3	Q2 3-2-4 3-2-4 4-0-4 3-2-4	Q3	Senior Year SE400 Senior Design Project I Technical Elective SE3910 Real-Time Systems Math/Science Elective Humanities/Social Science Elective SE401 Senior Design Project II Technical Elective Math/Science Elective IE423 Engineering Economy Humanities/Social Science Elective SE402 Senior Design Project III Technical Elective	Q1 2-2-3 3-0-3 3-2-4 3-0-3 3-0-3	Q2 2-2-3 3-0-3 3-0-3 3-0-3 3-0-3	Q3
Sophomore Year SE2030 Software Engineering Tools and Practices CS2911 Network Protocols MA2310 Discrete Mathematics I Math/Science Elective Business Elective SE2811 Software Component Design SE2840 Web Application Development CS2711 Computer Organization Science Elective See Software Development III SE2040 Software Development III SE2832 Introduction to Software Verification	Q1 2-2-3 3-2-4 3-0-3 3-0-3 3-0-3	Q2 3-2-4 3-2-4 4-0-4 3-2-4	Q3	Senior Year SE400 Senior Design Project I Technical Elective SE3910 Real-Time Systems Math/Science Elective Humanities/Social Science Elective SE401 Senior Design Project II Technical Elective Math/Science Elective IE423 Engineering Economy Humanities/Social Science Elective SE402 Senior Design Project III Technical Elective Humanities/Social Science Elective	Q1 2-2-3 3-0-3 3-2-4 3-0-3 3-0-3	Q2 2-2-3 3-0-3 3-0-3 3-0-3 3-0-3	Q3
Sophomore Year SE2030 Software Engineering Tools and Practices CS2911 Network Protocols MA2310 Discrete Mathematics I Math/Science Elective Business Elective SE2811 Software Component Design SE2840 Web Application Development CS2711 Computer Organization Science Elective Science Elective SE2040 Software Development III SE2800 Software Engineering Process I SE2832 Introduction to Software Verification MA262 Probability and Statistics	Q1 2-2-3 3-2-4 3-0-3 3-0-3 3-0-3	Q2 3-2-4 3-2-4 4-0-4 3-2-4	Q3	Senior YearSE400Senior Design Project ITechnical ElectiveSE3910Real-Time SystemsMath/Science ElectiveHumanities/Social Science ElectiveSE401Senior Design Project IITechnical ElectiveMath/Science ElectiveIE423Engineering EconomyHumanities/Social Science ElectiveSE402Senior Design Project IIITechnical ElectiveHumanities/Social Science ElectiveSE402Senior Design Project IIITechnical ElectiveHumanities/Social Science ElectiveHumanities/Social Science ElectiveHumanities/Social Science ElectiveHumanities/Social Science Elective	Q1 2-2-3 3-0-3 3-2-4 3-0-3 3-0-3	Q2 2-2-3 3-0-3 3-0-3 3-0-3 3-0-3	Q3
Sophomore Year SE2030 Software Engineering Tools and Practices CS2911 Network Protocols MA2310 Discrete Mathematics I Math/Science Elective Business Elective SE2811 Software Component Design SE2840 Web Application Development CS2711 Computer Organization Science Elective Science Elective SE2040 Software Development III SE2832 Introduction to Software Verification MA262 Probability and Statistics MS344 Org. Behavior & Leadership Development	Q1 2-2-3 3-2-4 3-0-3 3-0-3 3-0-3	Q2 3-2-4 3-2-4 4-0-4 3-2-4	Q3 	Senior YearSE400Senior Design Project ITechnical ElectiveSE3910Real-Time SystemsMath/Science ElectiveHumanities/Social Science ElectiveSE401Senior Design Project IITechnical ElectiveMath/Science ElectiveIE423Engineering EconomyHumanities/Social Science ElectiveSE402Senior Design Project IIITechnical ElectiveIE423Engineering EconomyHumanities/Social Science ElectiveSE402Senior Design Project IIITechnical ElectiveHumanities/Social Science ElectiveHumanities/Social Science ElectiveFree Elective	Q1 2-2-3 3-0-3 3-2-4 3-0-3 3-0-3	Q2 2-2-3 3-0-3 3-0-3 3-0-3 3-0-3	Q3

There are 46 credits of elective subjects which must be taken as follows:

15 credits of humanities/social sciences: 6 HU credits, 6 SS credits, 3 HU or SS credits 4 credits of science: BI-102, BI-256, BI-1020, BI-2020, CH-201, CH-223, or PH-2031 *Note: CH-200 may be replaced with BI-102 9 credits of approved math or science electives

9 credits of approved software engineering program electives

6 credits of approved courses from any area

3 credits of approved business/entrepreneurship electives