Software Engineering – General Program
September Entry

Year	Term	Course	Title	Credit	Prerequisite	Co-requisite
Year 1	Fall	COMP 232	Mathematics for Computer Science	3.00	MATH 203, 204	
		COMP 248	Object-Oriented Programming I	3.50		MATH 204
		ENGR 201	Professional Practice and Responsibility	1.50		
		ENGR 213	Applied Ordinary Differential Equations	3.00	MATH 205	MATH 204
			General Education Humanities & Social Sciences Elective	3.00		
	Winter	COMP 249	Object-Oriented Programming II	3.50	COMP 248; MATH 203	MATH 205
		ENGR 233	Applied Advanced Calculus	3.00	MATH 204, 205	
		SOEN 228	System Hardware	4.00	MATH 203, 204	
		SOEN 287	Web Programming	3.00	COMP 248	
			Engineering and Natural Science Group: Software Engineering	3.00		
Year 2	Fall	COMP 348	Principles of Programming Languages	3.00	COMP 249	
		COMP 352	Data Structures and Algorithms	3.00	COMP 249	COMP 232
		ENCS 282	Technical Writing and Communication	3.00	Students must pass the Engineering Writing Test (EWT), or pass ENCS 272 with a grade of C- or higher	
		ENGR 202	Sustainable Development and Environmental Stewardship	1.50		
		SOEN 341	Software Process and Practices	4.00		COMP 352 or COEN 352, ENCS 282
	Winter	COMP 346	Operating Systems	4.00	COMP 228 or SOEN 228; COMP 352	
		ELEC 275	Principles of Electrical Engineering	3.50	PHYS 205	ENGR 213
		ENGR 371	Probability and Statistics in Engineering	3.00	ENGR 213, ENGR 233	
		SOEN 331	Formal Methods for Software Engineering	3.00	COMP 232, COMP 249	

Software Engineering – General Program
September Entry

Year	Term	Course	Title	Credit	Prerequisite	Co-requisite
Year 3	Fall	COMP 335	Introduction to Theoretical Computer Science	3.00	COMP 232 or COEN 231; COMP 249 or COEN 244	
		COMP 432	Machine Learning	4.00	COMP 352	
		SOEN 342	Software Requirements and Deployment	3.00	SOEN 341	
		SOEN 343	Software Architecture and Design	4.00		SOEN 341, SOEN 342
		SOEN 384	Management, Measurement and Quality Control	3.00	ENCS 282; SOEN 341	
	Winter	SOEN 363	Data Systems for Software Engineers	3.00	COMP 352	
		SOEN 345	Software Testing, Verification and Quality Assurance	4.00		SOEN 343
		SOEN 357	User Interface Design	3.00	SOEN 341 or COMP 354	
		SOEN 390	Software Engineering Team Design Project	3.50		SOEN 345, SOEN 357
			Software Engineering Elective*			
Year 4	Fall	ENGR 301	Engineering Management Principles and Economics	3.00		
		SOEN 321	Information Systems Security	3.00	COMP 346 or COEN 346	
		SOEN 490	Capstone Software Engineering Design Project	6.00	SOEN 390; Must have completed 75 credits in the program prior to enrolling	
			Software Engineering Elective*			
	Winter	ENGR 392	Impact of Technology on Society	3.00	ENCS 282; ENGR 201, ENGR 202	
		SOEN 490	Capstone Software Engineering Design Project		SOEN 390; Must have completed 75 credits in the program prior to enrolling	
			Software Engineering Elective*			

***Please note, only core courses are listed above, and not all Software Engineering Electives have been assigned a row in the above sequence.**
Students in the General Program must complete at least 16 SOEN elective credits. For more information, please consult section 71.70.9 of the Undergraduate Calendar.
To be considered full-time, students must register for a minimum of 12 credits per term.

Software Engineering – General Program
January Entry

Year	Term	Course	Title	Credit	Prerequisite	Co-requisite
Year 1	Winter	COMP 232	Mathematics for Computer Science	3.00	MATH 203, 204	
		COMP 248	Object-Oriented Programming I	3.50		MATH 204
		ENGR 201	Professional Practice and Responsibility	1.50		
		ENGR 213	Applied Ordinary Differential Equations	3.00	MATH 205	MATH 204
		SOEN 228	System Hardware	4.00	MATH 203, 204	
	Summer	COMP 249	Object-Oriented Programming II	3.50	COMP 248; MATH 203	MATH 205
		ENGR 202	Sustainable Development and Environmental Stewardship	1.50		
		ENGR 233	Applied Advanced Calculus	3.00	MATH 204, 205	
		SOEN 287	Web Programming	3.00	COMP 248	
			General Education Humanities & Social Sciences Elective	3.00		
Year 2	Fall	COMP 348	Principles of Programming Languages	3.00	COMP 249	
		COMP 352	Data Structures and Algorithms	3.00	COMP 249	COMP 232
		ENCS 282	Technical Writing and Communication	3.00	Students must pass the Engineering Writing Test (EWT), or pass ENCS 272 with a grade of C- or higher	
		ELEC 275	Principles of Electrical Engineering	3.50	PHYS 205	ENGR 213
		SOEN 341	Software Process and Practices	4.00		COMP 352 or COEN 352, ENCS 282
	Winter	COMP 346	Operating Systems	4.00	COMP 228 or SOEN 228; COMP 352	
		ENGR 371	Probability and Statistics in Engineering	3.00	ENGR 213, ENGR 233	
		SOEN 331	Formal Methods for Software Engineering	3.00	COMP 232, COMP 249	
			Engineering and Natural Science Group: Software Engineering	3.00		

Software Engineering – General Program
January Entry

Year	Term	Course	Title	Credit	Prerequisite	Co-requisite
Year 3	Fall	COMP 335	Introduction to Theoretical Computer Science	3.00	COMP 232 or COEN 231; COMP 249 or COEN 244	
		COMP 432	Machine Learning	4.00	COMP 352	
		SOEN 342	Software Requirements and Deployment	3.00	SOEN 341	
		SOEN 343	Software Architecture and Design	4.00		SOEN 341, SOEN 342
		SOEN 384	Management, Measurement and Quality Control	3.00	ENCS 282; SOEN 341	
	Winter	SOEN 363	Data Systems for Software Engineers	3.00	COMP 352	
		SOEN 345	Software Testing, Verification and Quality Assurance	4.00		SOEN 343
		SOEN 357	User Interface Design	3.00	SOEN 341 or COMP 354	
		SOEN 390	Software Engineering Team Design Project	3.50		SOEN 345, SOEN 357
			Software Engineering Elective*			
Year 4	Fall	ENGR 301	Engineering Management Principles and Economics	3.00		
		SOEN 321	Information Systems Security	3.00	COMP 346 or COEN 346	
		SOEN 490	Capstone Software Engineering Design Project	6.00	SOEN 390; Must have completed 75 credits in the program prior to enrolling	
			Software Engineering Elective*			
	Winter	ENGR 392	Impact of Technology on Society	3.00	ENCS 282; ENGR 201, ENGR 202	
		SOEN 490	Capstone Software Engineering Design Project		SOEN 390; Must have completed 75 credits in the program prior to enrolling	
			Software Engineering Elective*			

***Please note, only core courses are listed above, and not all Software Engineering Electives have been assigned a row in the above sequence.**
Students in the General Program must complete at least 16 SOEN elective credits. For more information, please consult section 71.70.9 of the Undergraduate Calendar.
To be considered full-time, students must register for a minimum of 12 credits per term.

Software Engineering – General Program
Co-op Entry

Year	Term	Course	Title	Credit	Prerequisite	Co-requisite
Year 1	Fall	COMP 232	Mathematics for Computer Science	3.00	MATH 203, 204	
		COMP 248	Object-Oriented Programming I	3.50		MATH 204
		ENGR 201	Professional Practice and Responsibility	1.50		
		ENGR 213	Applied Ordinary Differential Equations	3.00	MATH 205	MATH 204
			General Education Humanities & Social Sciences Elective	3.00		
	Winter	COMP 249	Object-Oriented Programming II	3.50	COMP 248; MATH 203	MATH 205
		ENGR 233	Applied Advanced Calculus	3.00	MATH 204, 205	
		SOEN 228	System Hardware	4.00	MATH 203, 204	
		SOEN 287	Web Programming	3.00	COMP 248	
			Engineering and Natural Science Group: Software Engineering	3.00		
	Summer	COMP 348	Principles of Programming Languages	3.00	COMP 249	
		COMP 352	Data Structures and Algorithms	3.00	COMP 249	COMP 232
		ENCS 282	Technical Writing and Communication	3.00	Students must pass the Engineering Writing Test (EWT), or pass ENCS 272 with a grade of C- or higher	
		ENGR 202	Sustainable Development and Environmental Stewardship	1.50		
		ENGR 371	Probability and Statistics in Engineering	3.00	ENGR 213, ENGR 233	
Year 2	Fall	Work Term 1				
	Winter	COMP 346	Operating Systems	4.00	COMP 228 or SOEN 228; COMP 352	
		ELEC 275	Principles of Electrical Engineering	3.50	PHYS 205	ENGR 213
		SOEN 331	Formal Methods for Software Engineering	3.00	COMP 232, COMP 249	
		SOEN 341	Software Process and Practices	4.00		COMP 352 or COEN 352, ENCS 282
	Summer	Work Term 2				

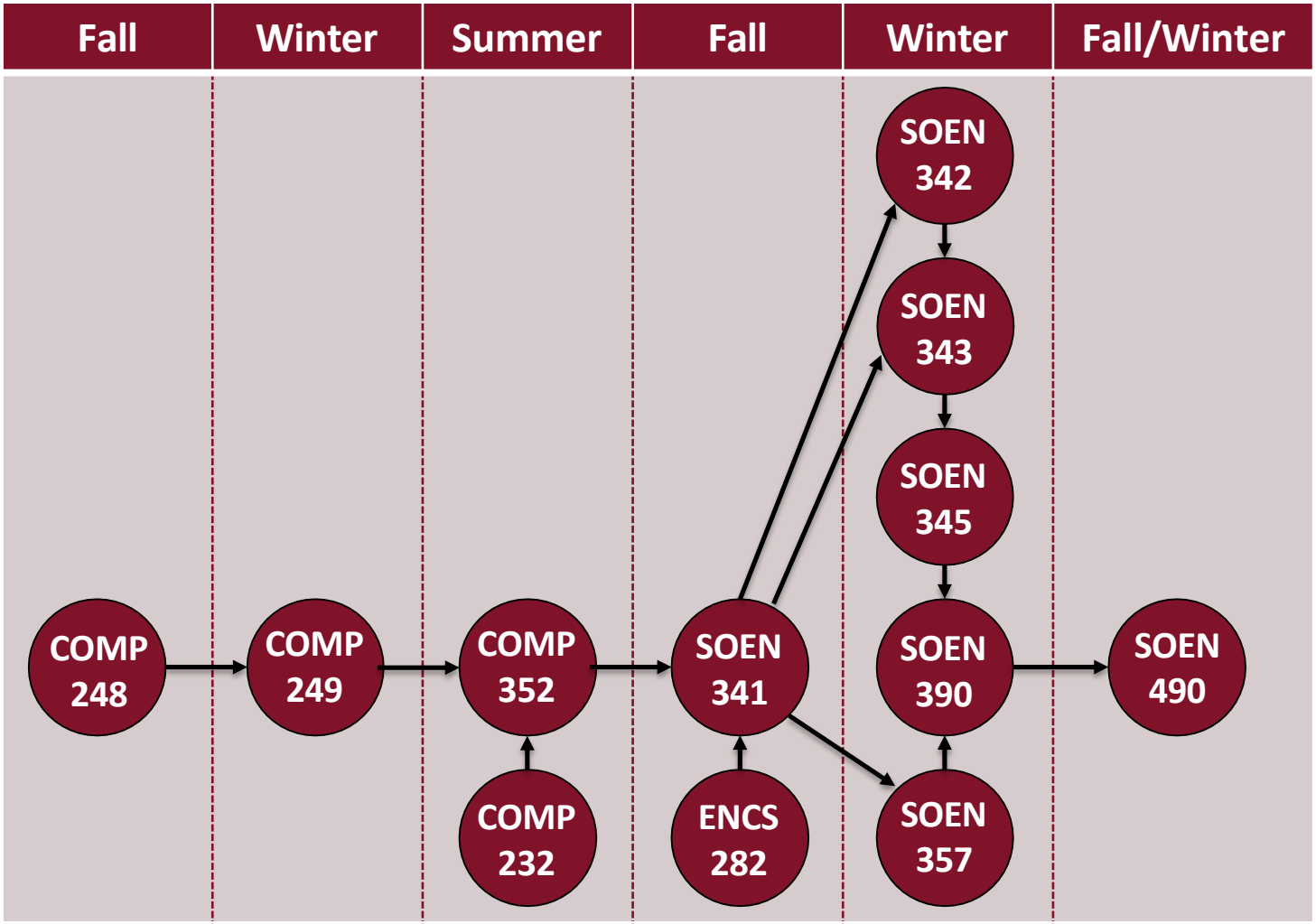
Software Engineering – General Program
Co-op Entry

Year 3	Fall	COMP 335	Introduction to Theoretical Computer Science	3.00	COMP 232 or COEN 231; COMP 249 or COEN 244	
		SOEN 342	Software Requirements and Deployment	3.00	SOEN 341	
		SOEN 343	Software Architecture and Design	4.00		SOEN 341, SOEN 342
		SOEN 384	Management, Measurement and Quality Control	3.00	ENCS 282; SOEN 341	
	Winter	SOEN 363	Data Systems for Software Engineers	3.00	COMP 352	
		SOEN 345	Software Testing, Verification and Quality Assurance	4.00		SOEN 343
		SOEN 357	User Interface Design	3.00	SOEN 341 or COMP 354	
		SOEN 390	Software Engineering Team Design Project	3.50		SOEN 345, SOEN 357
			Software Engineering Elective*			
	Summer	Work Term 3				

Year 4	Fall	ENGR 301	Engineering Management Principles and Economics	3.00		
		SOEN 321	Information Systems Security	3.00	COMP 346 or COEN 346	
		SOEN 490	Capstone Software Engineering Design Project	6.00	SOEN 390; Must have completed 75 credits in the program prior to enrolling	
			Software Engineering Elective*			
	Winter	ENGR 392	Impact of Technology on Society	3.00	ENCS 282; ENGR 201, ENGR 202	
		COMP 432	Machine Learning	4.00	COMP 352	
		SOEN 490	Capstone Software Engineering Design Project		SOEN 390; Must have completed 75 credits in the program prior to enrolling	
			Software Engineering Elective*			

***Please note, only core courses are listed above, and not all Software Engineering Electives have been assigned a row in the above sequence.**
Students in the General Program must complete at least 16 SOEN elective credits. For more information, please consult section 71.70.9 of the Undergraduate Calendar.
To be considered full-time, students must register for a minimum of 12 credits per term.

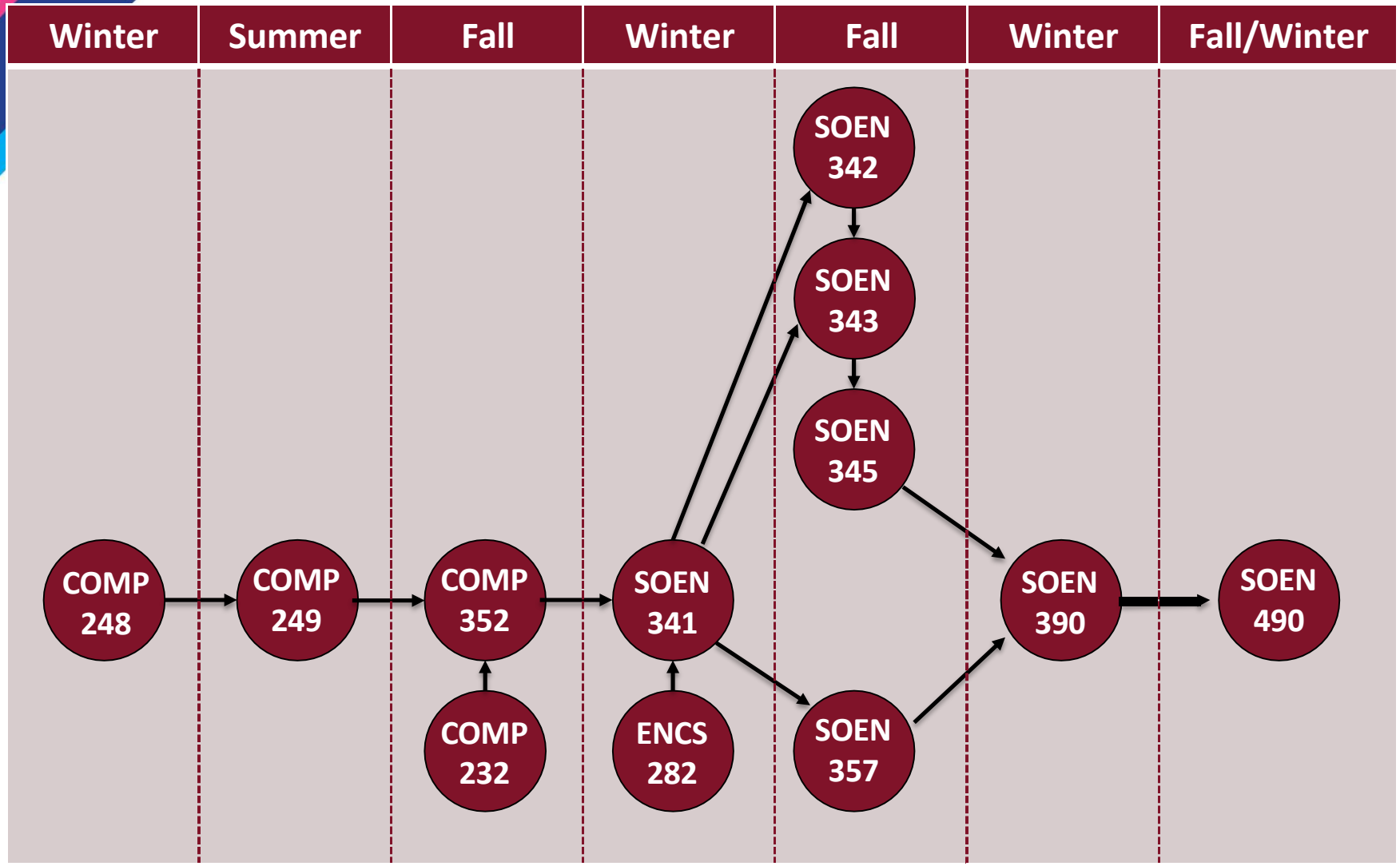
Critical Path for Software Engineering
September Entry



*Failure to complete the above courses in sequence may result in scheduling delays

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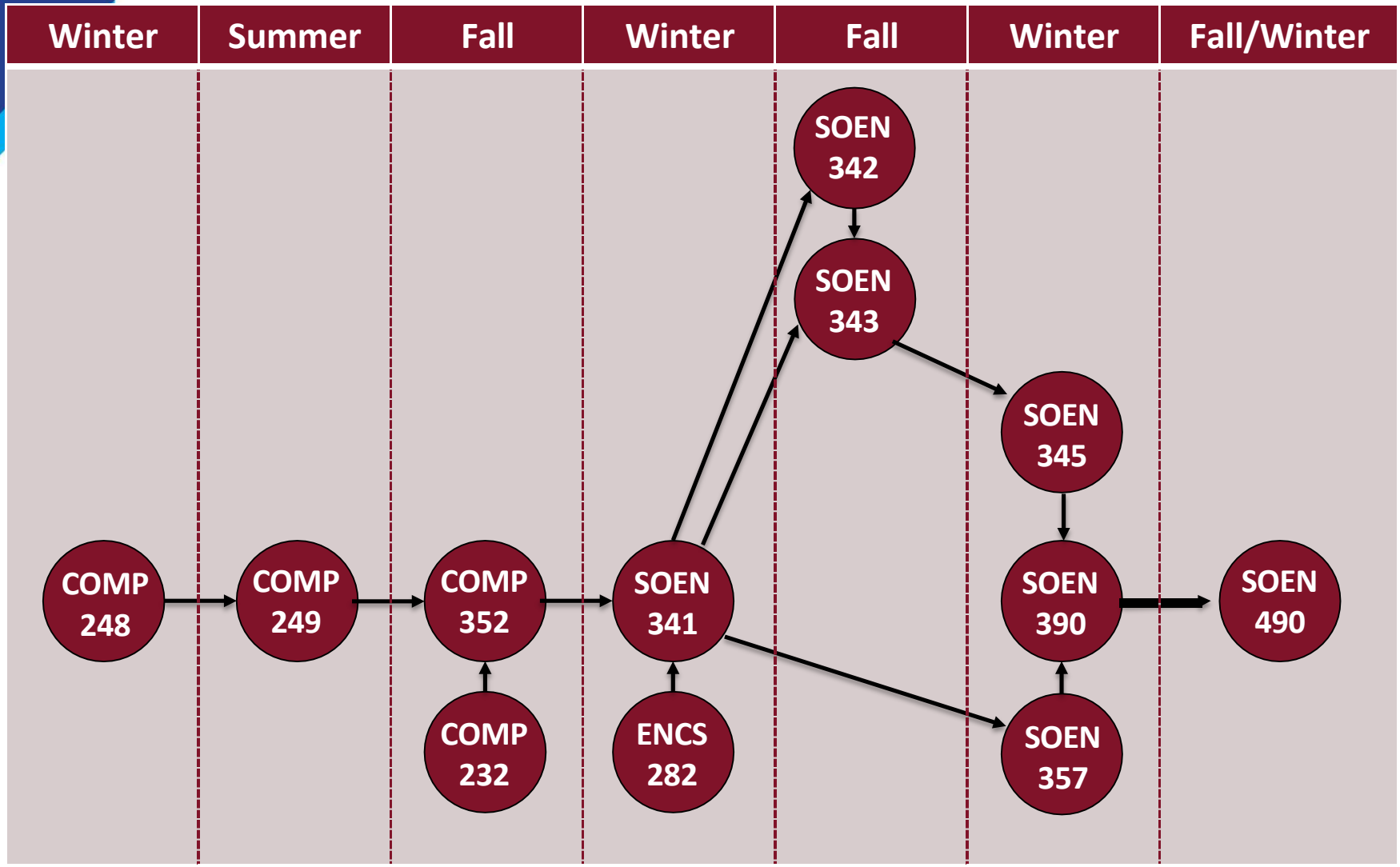
Critical Path for Software Engineering
January Entry (Option 1)



*Failure to complete the above courses in sequence may result in scheduling delays

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Critical Path for Software Engineering
January Entry (Option 2)



*Failure to complete the above courses in sequence may result in scheduling delays

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