

Montana Technological University
Bachelor of Science in SOFTWARE ENGINEERING
with

Name: _____

Custom

2022 - 2023 Catalog

Fall Semester

Spring Semester

FRESHMAN YEAR

			Credits	Sem	Grade
CSCI	194	Freshman Seminar	1	_____	_____
CSCI	135	Fund. of Computer Science I	3	_____	_____
M	171	Calculus I	3	_____	_____
WRIT	121	Intro to Technical Writing****	3	_____	_____
--	--	<i>Social Science Elective**</i>		--	--
			3	_____	_____
--	--	<i>Humanities Elective**</i>		--	--
			3	_____	_____
Total Credits			16		

			Credits	Sem	Grade
CSCI	136	Fund. of Computer Science II	3	_____	_____
COMX	230	Presenting Technical Information*	3	_____	_____
M	172	Calculus II	3	_____	_____
PHSX	234	General Physics - Mechanics	3	_____	_____
CSCI	210	Web Programming	3	_____	_____
--	--	<i>Humanities Elective**</i>		--	--
			3	_____	_____
Total Credits			18		

SOPHOMORE YEAR

CSCI	232	Data Struct & Algorithms	3	_____	_____
CSCI	246	Discrete Structures	3	_____	_____
CSCI	443	User Interface Design	3	_____	_____
M	273	Multivariable Calculus	4	_____	_____
PHSX	235	General Physics - H, S, & O	3	_____	_____
PHSX	236	General Physics-H, S, & O Lab	1	_____	_____
Total Credits			17		

CSCI	332	Design and Analysis of Algor.	3	_____	_____
ECNS	203	Principles of Micro and Macro	3	_____	_____
M	274	Intro to Differential Equations	3	_____	_____
PHSX	237	General Phys - Elect, Mag, & Wave	3	_____	_____
PHSX	238	General Phys-Elect, Mag, & Wave Lab	1	_____	_____
CSCI	255	Intro. To Embedded Systems	3	_____	_____
Total Credits			16		

JUNIOR YEAR

CSCI	305	Concepts of Programming Lang	3	_____	_____
CSCI	347	Data Mining	3	_____	_____
ESOF	322	Software Engineering	3	_____	_____
★STAT	332	Statistics for Scientists & Engin	3	_____	_____
--	--	<i>Professional Elective***</i>		--	--
			3	_____	_____
Total Credits			15		

CSCI	361	Computer Architecture	3	_____	_____
ESOF	476	Engr. Secure Software	3	_____	_____
ESOF	328	Requirements & Specifications	3	_____	_____
WRIT	321W	Adv. Technical Writing****	3	_____	_____
CSCI	440	Advanced Database	3	_____	_____
Total Credits			15		

SENIOR YEAR

CSCI	466	Networks	3	_____	_____
EGEN	325	Engr. Economic Analysis	3	_____	_____
ESOF	427	Software Design & Architecture	3	_____	_____
ESOF	486	Senior Design Project I	2	_____	_____
--	--	<i>Free Elective</i>		--	--
			2	_____	_____
--	--	<i>Professional Elective***</i>		--	--
			3	_____	_____
Total Credits			16		

CSCI	460	Operating Systems	3	_____	_____
CSCI	470	Web Science	3	_____	_____
ESOF	411	Software Verification & Validation	3	_____	_____
ESOF	487	Senior Design Project II	2	_____	_____
CSCI	494	Senior Seminar	1	_____	_____
--	--	<i>Professional Elective***</i>		--	--
			3	_____	_____
Total Credits			15		

Minimum credits for B.S. degree in Software Engineering = 128

Total Credits on Sheet: 128

Credits Completed: 0

* COMX 111 Intr to Public Speaking can replace COMX 230.

**Electives must be chosen to meet GER (3 credits in Social Sciences & 6 credits in Humanities).

*** Professional electives are the classes that meet the Software Engineering degree focus areas (Professional electives on other side.)

****WRIT 101 College Writing I can replace WRIT 121 Intro to Technical Writing. WRIT 325W Writing in the Sciences, WRIT 322W Advanced Business Writing can replace WRIT 321W.

CUSTOM FOCUS AREA
Professional Electives --- Junior and Senior Years
9 Credits

Custom					
<i>Junior Year</i>					
PGM	Number	Title	<u>Fall</u>	<u>Spring</u>	<u>Sem/Gr</u>
			3		
<i>Senior</i>					
PGM	Number	Title	3		
PGM	Number	Title		3	
<i>Work with your advisor to select 9 credits of courses</i>					