

Bachelor of Arts Computer Science Graduation Worksheet 2021-2022 Semester Catalog

Revised 3/26/2021

Name _____ Advisor _____

- This worksheet goes into effect at the beginning of **Fall Semester, 2021**.
- It is recommended that you utilize this worksheet in combination with your DegreeWorks worksheet.
- Keep this worksheet up to date and bring it with you each time you meet with your advisor. It will help your advisor give you better advice when you register for classes.
- Substitute courses are sometimes allowed. Normally, the substitute course column is to be used for courses transferred in from another university. However, sometimes one MSU course can be substituted for another. See your advisor for specific questions. In either case, enter the substituted course in the *Substitution Course* column and enter the credits in the *Substitute Credits* column. *Your advisor must approve substitutions.* Do not assume that a substitution will be allowed.
- You may not use pass/fail courses except in the *unrestricted electives* section.
- All course grades must be at least a C- to count towards your degree.
- If you would like to see a typical semester-by-semester schedule of classes for a Computer Science major, please check out www.montana.edu/wwwcat/programs/cs.html.
- This is a complex form and may contain a few errors. If you notice any, please notify Hunter Lloyd (hunter.lloyd@montana.edu) or Sharlyn Gunderson-Izurieta (Sharlyn.Izurieta@montana.edu).

1. Bachelor of Arts Options

- The B.A. in Computer Science is intended for students who have interests in both computing and anon-STEM area in the arts, the humanities, or business.
- Students opting into the Complimentary Minor or a Faculty Approved Plan are required to complete the first year of a modern language (101 & 102 in ARAB, CHIN, FRCH, GRMN, JPNS or SPNS).
- Meet with your advisor to determine the most appropriate Broadening Course Option.

Broadening Course Options		
Option 1: Paired Major	Option 2: Paired Minor	Option 3: Paired Plans
<ul style="list-style-type: none"> • Approval from paired major advisor required. • Complete the requirements for the paired major. 	<ul style="list-style-type: none"> • Approval from paired minor advisor required. • Complete the requirements for the paired minor. 	<ul style="list-style-type: none"> • Completion of a paired plan. • A custom plan is an option, please meet with your advisor for more information.

For a list of paired majors, minors and approved plans, please visit the MSU catalog, www.montana.edu/wwwcat/programs/cs.html.

2. Required Computer Science Courses

COURSE	TITLE	CREDITS	SUBSTITUTE COURSE	SUBSTITUTE CREDITS	GRADE
CSCI 107	Joy and Beauty of Computing	3			
CSCI 127	Joy and Beauty of Data	4			
CSCI 132	Basic Data Structures and Algorithms	4			
CSCI 232	Data Structures and Algorithms	4			
ESOF 322	Software Engineering	3			
ESOF 423	Software Engineering Applications	3			
CSCI 481	Program Assessment	0			

Total Credits: _____

300+ Level Credits _____

3. Computer Science Elective Courses – Upper Division

- You must take 9 credits from the courses below.
- There are some special courses, such as CSCI 491 that can also be used here.
- Seniors may petition to use CS graduate courses in this section.
- Non-lecture courses such as CSCI 498, Internship, and CSCI 492, Independent Study, MAY NOT be used on this page.

COURSE	TITLE	CREDITS	SUBSTITUTE COURSE	SUBSTITUTE CREDITS	GRADE
CSCI 331	Web Development	3			
CSCI 347	Data Mining	3			
CSCI 351	Systems Administration	3			
EIND 422	Simulation	3			
ESOF 422	Adv. Software Engineering	3			
CSCI 432	Adv. Algorithm Topics	3			
CSCI 440	Database Systems	3			
CSCI 441	Computer Graphics	3			
CSCI 442	Robot Vision	3			
CSCI 443	User Interface Design	3			
CSCI 445	Human Computer Interaction				
CSCI 446	Artificial Intelligence	3			
CSCI 447	Soft Computing: Machine Learning	3			
CSCI 451	Computational Biology	3			
CSCI 455	Robotics	3			
CSCI 460	Operating Systems	3			
CSCI 466	Networks	3			
CSCI 468	Compilers	4			
CSCI 476	Computer Security	3			
CSCI 495	Student Teaching	1			

Total Credits: _____

300+ Level Credits _____

4. Computer Science Elective Courses – Any Level

- You need 10 credits of computer science electives at any level in the section.
- Any CSCI, ESOF or CS course not used in the first two sections may be used here. For example, CS 145RA, CSCI 112 or CSCI 492 could be used here.
- Any computer science course not listed in the first two sections of this sheet, such as CSCI 112 or CS 145RA may be used here.

COURSE	TITLE	CREDITS	SUBSTITUTE COURSE	SUBSTITUTE CREDITS	GRADE

Total Credits: _____

300+ Level Credits _____

5. Required Math Courses

- M 171 or M 181 can substitute for M 165.
- M 166 or M 172 or M 182 can substitute for STAT 217.

COURSE	TITLE	CREDITS	SUBSTITUTE COURSE	SUBSTITUTE CREDITS	GRADE
STAT 216Q	Intro to Statistics	3			
STAT 217Q	Intermediate Statistical Concepts	3			
M 165	Calculus for Tech 1	3			
CSCI 246	Discrete Structures	3			

Total Credits: _____

300+ Level Credits _____

6. Remaining Core 2.0 and Writing

COURSES	TITLE	CREDITS	SUBSTITUTE COURSE	SUBSTITUTE CREDITS	GRADE
US		3			
WRIT 101 W	College Writing I	3			
WRIT 221	Intermediate Tech Writing	3			
CS		3			
IN or RN		3			
IA or RA		3			
IH or RH		3			
IS or RS		3			
D		3			

Total Credits: _____

300+ Level Credits _____

7. Unrestricted Electives

- You might need to take additional credits of elective courses to bring your credit total to 120. Add up the credit totals in the other sections and subtract from 120 to determine exactly how many unrestricted elective credits you need.
- Any university course may be used in this section if it has not been used in another section on this worksheet.
- You must accumulate at least 42-credits in courses numbered 300 or above. If you have taken courses at this level that are not listed in any other section on this worksheet, and if you need to count these courses in order to meet the 42-credit requirement, list them here.

COURSE	TITLE	CREDITS	SUBSTITUTE COURSE	SUBSTITUTE CREDITS	GRADE

Total Credits: _____

300+ Level Credits _____

8. Checklist for Graduation

_____ Total number of credits. Must be at least 120.

_____ Total number of 300+ level credits. Must be at least 42.

Yes or No All course grades are at least a C-.

9. Graduation Application Instructions

Congratulations – you are almost finished!

Graduation Applications must be submitted by the following dates:

October 1st, 2021 for Spring Graduation 2022.

March 1st, 2022 for Summer or Fall Graduation 2022.

1. Schedule an appointment with your department advisor. Please plan ahead to ensure completion of materials before the graduation application deadline. Before you meet with your advisor:
 - Create a “Graduation Plan” for your final semester in DegreeWorks (use this worksheet to cross-check that you have met all the requirements).
2. After your graduation plan is correct, email the School of Computing office (soc-info@montana.edu) with your name, email, degree program, advisor name, and minor(s) (if applicable). The office will then provide these details to the Certifying Officer.
3. The certifying officer will conduct an audit to ensure that your course requirements have been completed. Once the forms are audited, the Certifying Officer will email the student and put a note in Degreeworks which will unlock the application for the student.
4. The student will then apply using the Degreeworks application, and submit those details to the Registrar through the application.
5. The Registrar’s Office will conduct a final audit during your final semester.
6. For any questions about the process, refer to montana.edu/registrar/Graduation.html