Interdisciplinary Option
Computer Science Graduation Worksheet
2021-2022 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. Required Computer Science Courses

COURSE	TITLE	CREDITS	SUBSTITUTE COURSE	SUBSTITUTE CREDITS	GRADE
CSCI 127	Joy and Beauty of Data	4			
CSCI 112	Programming with C	3			
CSCI 132	Basic Data Structures and Algorithms	4			
CSCI 215CS	Social and Ethical Issues in CS	3			
CSCI 232	Data Structures and Algorithms	4			
CSCI 305	Concepts of Progr. Languages	3			
EGEN 310R	Engineering Design	3			
ESOF 322	Software Engineering	3			
CSCI 338	Computer Science Theory	3			
CSCI 366	Computer Systems	3			
CSCI 481	Program Assessment	0			
CSCI 482R	Interdisciplinary Project Instruction	1			
CSCI 483R	Interdisciplinary Project	3			

Total Credits: _____

300+ Level Credits _____

2. Computer Science Elective Courses

- You must take 19 credits from the courses below.
- There are some special courses, such as CSCI or ESOF 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			
ESOF 423	Software Engr. Applications				
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	3			
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 _____

3. Minor in Field of Choice

- Complete a minor or additional major in a field outside of Computer Science.
- This section must contain at least 12 credits of coursework that is not listed elsewhere on this worksheet.
- Please meet with your Minor degree advisor regarding course requirements.

COURSE	TITLE	CREDITS	SUBSTITUTE COURSE	SUBSTITUTE CREDITS	GRADE

Total Credits: _____

300+ Level Credits _____

4. Required Math Courses

- You must list a total of 30 credits of Math and Science courses in section 4 and section 5, and section 6 of this worksheet.
- The math/statistics electives can be satisfied by any relevant 200+ level course, such as EIND 354.

COURSE	TITLE	CREDITS	SUBSTITUTE COURSE	SUBSTITUTE CREDITS	GRADE
CSCI 246	Discrete Structures	3			
M 171	Calculus I	4			
M 172	Calculus II	4			
	Math/Statistics Elective (200+ level)	3			
	Math/Statistics Elective (200+ level)	3			

5. Required Science Courses

- As part of the 30 required Math and Science Courses, you must take at least 7 credits of Science electives.
- One of those courses that make up the 7 credits must have an accompanying 1+ credit lab.
- Below are a list of approved courses that fulfill these requirements:

  - BIOB 105CS, BIOB 110CS, BIOB 160, BIOB 170IN, BIOB 260, BIOH 201, BIOH 211, BIOM 210RN, BIOM 250, BIOO 220, CHMY 123, CHMY 141, CHMY 143, CHMY 151, CHMY 153, CHMY 211, ENSC 245IN, ERTH 101, ERTH 201, GEO103CS, GEO 211, NRSM 240, PHSX 220, PHSX 222, PHSX 224, PHSX 240, PHSX 242

COURSE	TITLE	CREDITS	SUBSTITUTE COURSE	SUBSTITUTE CREDITS	GRADE

6. Math and Science Elective Courses

- The Credits in Sections 4, 5 and 6 must total at least 30.
- You may use additional math courses at the 200 level or higher
- You may use additional statistics courses.
- You may use any other science courses, such as ASTR 110, with the exceptions of PHSX 103, PHSX 205, PHSX 207, and CHMY 121IN.

COURSE	TITLE	CREDITS	SUBSTITUTE COURSE	SUBSTITUTE CREDITS	GRADE

Total Credits of Section 4, Section 5 and Section 6 combined _____

300+ Level Credits Section 4, 5 and 6 combined _____

7. Core 2.0/Computer Science Accreditation Core

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

Total Credits: _____

300+ Level Credits _____

8. 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 _____

9. 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-.

10. 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