Interdisciplinary Option
Computer Science Graduation Worksheet
2012-2014 Semester Catalog

Revised 05/17/2012

Name _____   Advisor _____

- This worksheet goes into effect in **Fall Semester, 2012**.

- 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 initial each approved substitution.* 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 is sure to contain a few errors. If you notice any, please notify Hunter Lloyd (hunterl@cs.montana.edu).

1. Required Computer Science Courses

COURSE	TITLE	CREDITS	SUBSTITUTE COURSE	SUBSTITUTE CREDITS	GRADE	ADVISOR'S INITIALS
CSCI 111	Programming with Java	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				
SE 322	Software Engineering	3				
CS 338	Computer Science Theory	3				
CSCI 361	Computer Architecture	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 491 that can also be used here.
- Seniors may petition to use CS graduate courses in this section.

COURSE	TITLE	CREDITS	SUBSTITUTE COURSE	SUBSTITUTE CREDITS	GRADE	ADVISOR'S INITIALS
CSCI 351	Systems Administration	3				
SE 422	Adv. Software Engineering	3				
CSCI 432	Adv. Algorithm Topics	3				
CSCI 440	Database Systems	3				
CSCI 442	Robot Vision	3				
CSCI 446	Artificial Intelligence	3				
CSCI 447	Soft Computing	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 477	Simulation	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.
- If the minor requires less than 12 additional credits to what you have listed on all other sections of this worksheet you must take additional credits from the minor rubric at the 200 level or higher so that this section contains at least 12 credits.

COURSE	TITLE……….	CREDITS	SUBSTITUTE COURSE	SUBSTITUTE CREDITS	GRADE	ADVISOR'S INITIALS

Total Credits: _____

300+ Level Credits _____

4. Math and Science Required Courses

- You must take a total of 30 credits of Math and Science courses from section 4 and section 5 of this worksheet.
- 17 of the 30 credits must be taken from the following table.
- M 221 and the statistics elective can be replaced by M 273 and M 274. This is an all or nothing substitution.
- The Statistics Elective can be satisfied by any probability or statistics course, such as EIND 354, that is at least a 200 level course.

COURSE	TITLE	CREDITS	SUBSTITUTE COURSE	SUBSTITUTE CREDITS	GRADE	ADVISOR'S INITIALS
CSCI 246	Discrete Structures	3				
M 171	Calculus I	4				
M 172	Calculus II	4				
M 221	Intro to Linear Algebra	3				
	Statistics Elective	3				

- Take two courses from the following to satisfy both the university IN and CS requirements. One of the courses must have an accompanying 1+ credit lab. (http://www.montana.edu/wwwcat/requirements/reqs4.html#Substitutions):

    BIOB 105, BIOB 110, BIOB 160, BIOB 170, BIOB 256, BIOB 258, BIOB 260, BIOM 210, BIOM 250, CHMY 123, CHMY 141, CHMY 143, CHMY 151, CHMY 153, CHMY 211, ENSC 245, GEO 103, GEO 205, GEO 211, GPHY 111, NRSM 240, PHSX 220, PHSX 222, PHSX 240, PHSX 242

COURSE	TITLE	CREDITS	SUBSTITUTE COURSE	SUBSTITUTE CREDITS	GRADE	ADVISOR'S INITIALS

5. Math and Science Elective Courses

- You must take enough elective credits in Science and Math to get your total credits from section 4 and section 5 to be 30 or greater.
- All math courses listed here must be 200 or greater
- Stat courses may also be used in this section, if they were not counted in section 4.
- Any science course except the following may be used: PHSX 103, PHSX 205, PHSX 207 and CHMY 121

COURSE	TITLE	CREDITS	SUBSTITUTE COURSE	SUBSTITUTE CREDITS	GRADE	ADVISOR'S INITIALS

Total Credits Section 4 and Section 5 combined _____

300+ Level Credits Section 4 and 5 combined _____

6. Core 2.0/Computer Science Accreditation Core

COURSES	TITLE	CREDITS	SUBSTITUTE COURSE	SUBSTITUTE CREDITS	GRADE	ADVISOR'S INITIALS
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 _____

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	ADVISOR'S INITIALS

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-.

 Yes or No   Advisor's initials appear on all courses listed in substitution columns.

 Yes or No   Advisor's signature appears below.

_____   _____

Advisor   Date

_____   _____

Certification Officer   Date

9. Graduation Application Instructions
Congratulations – you are almost finished!

Applications for the baccalaureate degree are due at the end of the semester one year prior to when you plan to graduate. For example, if you intend to graduate after Spring Semester, 2014, you would need to apply for graduation at the end of Spring Semester, 2013.

1. Print out a copy of your current, unofficial transcript.

2. Fill everything out with clear handwriting.

3. Obtain the blue *Application for Baccalaureate Degree* from the CS office.

4. Fill out this *Computer Science Graduation Worksheet* with all courses you have completed using non-red ink.

5. Fill out this *worksheet* with all courses that you are currently taking or that you plan to take with red ink.

6. Fill out the entire rest of this *worksheet* using non-red ink. Double check to see that you are meeting all of the requirements!

7. Fill out the *Application for Baccalaureate Degree* form using non-red ink. Fill out completely the <u>Please Print in Ink or Type</u> section, the <u>Departmental and College Requirements</u> section and the <u>To Be Completed By The Student</u> section on the back.

8. Take your transcript, your completely filled out *Application for Baccalaureate Degree*, and this completely filled out *Computer Science Graduation Worksheet* to your advisor.

9. Your advisor will check that everything is filled out properly (grades, credit tallies, etc.). Once the forms are checked, the advisor will sign in the appropriate places and then keep the forms to pass on to the CS secretary.