



MONTANA STATE UNIVERSITY BILLINGS

COMPUTER PROGRAMMING and APPLICATION DEVELOPMENT
ASSOCIATE OF APPLIED SCIENCE

ADVISING WORKSHEET 2014-2015

City College
Jacket Student Central
Phone: 406-247-3019
Fax: 406-247-3095

Name _____

Student ID # _____

The required classes in this program begin in the fall semester.

Before a student can be accepted into the Computer Programming and Application Development degree program, competency in mathematics and computers must be demonstrated. This may be done by:

- Passing the math and computer placement test
- Transfer of appropriate credits
- Current ACT/SAT scores in the required range
- Taking the necessary prerequisite English, math and/or computer classes identified in the catalog

Course			Credits	Grade	Semester	Equivalent
Recommended Preparatory Courses						
CAPP	120	Introduction to Computers	3			

Required Preparatory Courses						

General Education Requirements

COMX	106	Communicating in a Dynamic Workplace	3			
M	143	Finite Mathematics	4			
WRIT	121	Intro to Technical Writing	3			

Required Courses

CAPP	156	MS Excel	3			
CAPP	158	MS Access	3			
CSCI	111B	Programming with Java I	4			
CSCI	113	Programming with C++I	3			
CSCI	114	Programming with C#	3			
CSCI	116	Introduction to Python Programming	3			
CSCI	121	Programming with Java II	4			
CSCI	124	Advanced C#/.NET	3			
CSCI	181	Web Design & Programming	3			

CSCI	211	Client Side Programming	3			
CSCI	214	Server-side Web Programming & Administration	3			
CSCI	223	Software Development	3			
CSCI	240	Databases and SQL	3			
CSCI	299	Thesis/Capstone	3			
ITS	163	MS Windows 8 Configuration	3			
ITS	170	MS Windows Server 2012	3			
ITS	224	Introduction to Linux	3			
NTS	104	CCNA 1: Intro to Networks	4			

Restricted Electives – 3 credits required, chosen in consultation with an advisor

Restricted Electives to choose from:

CSCI 241 PL/SQL..... 3
CSCI 298 Technical Support Internship.....3

TOTAL MINIMUM CREDITS REQUIRED 70

A grade of “C” or higher is mandatory in all required courses.

Categories	Credits	Earned	Remaining
General Education	10	_____	_____
Required Courses	57	_____	_____
Restricted Electives	3	_____	_____
Total Required	70	_____	_____

Transcript evaluation (if applicable completed) by: _____ on _____

Developing a Plan of Study

To facilitate course planning and scheduling, students should be aware that not all courses are offered every semester. Some courses require pre-requisites and preparatory courses to be successfully completed or co-requisites be taken simultaneously.

Selected Courses and Prerequisites

Key: F= Fall; S=Spring; X=Summer; # = online

Computer Programming and Application Development Associate of Applied Science:

Course	Required Pre-requisite	Recommended Pre-requisite	Required Co-Requisite	Recommended Co-requisite	Term Offered
Recommended: CAPP 120					F, F#, S, S#, X, X#
CAPP 156	CAPP 120				F, F#, S, S#
CAPP 158	CAPP 120				F, F#, S, S#
COMX 106					F, F#, S, S#, X, X#
CSCI 111B	CAPP 120				F
CSCI 113					S
CSCI 114	CSCI 110				F
CSCI 116					F
CSCI 121	CSCI 111B				F
CSCI 124	CSCI 114				S
CSCI 181					F,S
CSCI 211	CSCI 181				S
CSCI 214	CSCI 181				S
CSCI 223	CSCI 110 or CSCI 115				F
CSCI 240	CAPP 158 or CSCI 114 or CSCI 116 or ITS 140				S
CSCI 241	CAPP 158 or CSCI 240				
CSCI 299	CSCI 121				S
NTS 104	CAPP 120				S,F
ITS 163	CAPP 120				F
ITS 170	ITS 163				S
ITS 224					F, S
M 143	M095 or equivalent test score				F, F#, S, S#, X#
WRIT 121	WRIT 095, WRIT 104, or equivalent test score, CAPP 120				F, S, S#
Restricted Electives (3 cr)	May require CAPP 120				F, S

Program Specific Information

Students should know the following information:

- 1) This program is difficult to do part time as classes from the previous semester are preparatory to the next semester.
- 2) Courses in this program are frequently in the late afternoon or early evening.
- 3) Restricted electives (3 credits required) must be chosen in consultation of a City College advisor.
- 4) Students that earn an AAS degree and want to further their education thus career; are able to go on for a Bachelor of Applied Science degree through the university campus MSUB. Students can work to complete General Education requirements and take upper division credits in areas of study which will complement their AAS credits already earned. There are a variety of options and thematic concentrations for completing the BAS degree. Please consult with an advisor for more information.

Suggested Plan of Study

First Semester	Credits	Second Semester	Credits
CAPP 156	3	CAPP 158	3
CSCI 114	3	CSCI 124	3
CSCI 116	3	CSCI 211	3
CSCI 181	3	ITS 170	3
ITS 163	3	ITS 224	3
WRIT 121	3	COMX 106	3
TOTAL	18	TOTAL	18

Third Semester	Credits	Fourth Semester	Credits
CSCI 240	3	CSCI 113	3
CSCI 111B	4	CSCI 214	3
CSCI 121	4	CSCI 299	3
CSCI 233	3	NTS 104	4
M 143	4	Restricted Elective	3
TOTAL	18	TOTAL	16



2014-2015 Computer Programming & Application Development AAS Plan of Study

City College

for _____

Date: _____

Semester _____

Semester _____

Course	Credits	Course	Credits
Total		Total	

Semester: Fall _____

Semester: Spring _____

Course	Credits	Course	Credits
CAPP 156	3	CAPP 158	3
CSCI 114	3	CSCI 124	3
CSCI 116	3	CSCI 211	3
CSCI 181	3	ITS 170	3
ITS 163	3	ITS 224	3
WRIT 121	3	COMX 106	3
Total		Total	

Semester: Fall _____

Semester: Spring _____

Course	Credits	Course	Credits
CSCI 111B	4	CSCI 113	3
CSCI 121	4	CSCI 214	3
CSCI 223	3	CSCI 299	3
CSCI 240	3	NTS 104	4
M 143	4	Restricted Elective	3
Total		Total	

Number of earned credits that apply toward degree: _____

Number of credits left to earn for degree: _____

CERTIFICATION: The courses listed are **required** for the student's degree.

Advisor's Signature: _____

Date: _____

Student's Signature: _____

Date: _____