## COMPUTER PROGRAMMING and APPLICATION DEVELOPMENT Associate of Applied Science

Advising Worksheet 2015-2016
Name $\qquad$
Student ID \# $\qquad$
Jacket Student Central
Phone: 406-247-3019
Fax: 406-247-3095
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 |
| :--- |
| Recommended Preparatory Courses | Credits | Grade |
| :--- |
| Semester |
|  Equivalent    <br> CAPP $120 \quad$ Introduction to Computers 3    <br>      <br> Required Preparatory Courses     <br>      <br>      |

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 | 111 B | 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 |  <br> 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 | 4 |  |  |  |
| NTS | 104 | CCNA 1: Intro to Networks |  |  |  |  |

Restricted Electives $\mathbf{-} \mathbf{3}$ credits required, chosen in consultation with an advisor

|  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |  |

## Restricted Electives to choose from:

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

TOTAL MINIMUM CREDITS REQUIRED 70 A grade of " $C$ " or higher is mandatory in all required courses.

Categories
General Education
Required Courses
Restricted Electives

Total Required

Credits
10
57
370

Earned
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$

Remaining
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$

Transcript evaluation (if applicable completed) by: $\qquad$ on $\qquad$

## 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 Prerequisite | Recommended Pre-requisite | Required CoRequisite | Recommended Co-requisite | Term Offered |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Recommended: <br> CAPP 120 |  |  |  |  | $\begin{aligned} & \text { F, F\#, S, S\#, } \\ & \text { X, X\# } \\ & \hline \end{aligned}$ |
| CAPP 156 | CAPP 120 |  |  |  | F, F\#, S, S\# |
| CAPP 158 | CAPP 120 |  |  |  | F, F\#, S, S\# |
| COMX 106 |  |  |  |  | $\begin{aligned} & \text { F, F\#, S, S\#, } \\ & \text { X, X\# } \end{aligned}$ |
| 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 | $\begin{aligned} & \text { CSCI } 110 \text { or } \\ & \text { CSCI } 115 \end{aligned}$ |  |  |  | F |
| CSCI 240 | CAPP 158 or CSCI 114 or CSCI 116 or NTS 104 |  |  |  | S |
| CSCI 241 | $\begin{aligned} & \text { CAPP } 158 \text { or } \\ & \text { CSCI } 240 \end{aligned}$ |  |  |  |  |
| 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 |  |  |  | $\begin{aligned} & \text { F, F\#, S, S\#, } \\ & \text { X\# } \end{aligned}$ |
| 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 Credit
CAPP 1563

CSCI 1143
CSCI 1163
CSCI 1813
ITS 163 3
WRIT 1213
TOTAL 18

| Third Semester | Credits |
| :--- | :---: |
| CSCI 240 | 3 |
| CSCI 111B | 4 |
| CSCI 121 | 4 |
| CSCI 233 | 3 |
| M 143 | 4 |
| TOTAL | $\mathbf{1 8}$ |


| Second Semester | Credits |
| :--- | :---: |
| CAPP 158 | 3 |
| COMX 106 | 3 |
| CSCI 124 | 3 |
| CSCI 211 | 3 |
| ITS 170 | 3 |
| ITS 224 | 3 |
| TOTAL | $\mathbf{1 8}$ |


| Fourth Semester | Credits |
| :--- | :---: |
| CSCI 113 | 3 |
| CSCI 214 | 3 |
| CSCI 299 | 3 |
| NTS 104 | 4 |
| Restricted Elective | 3 |
| TOTAL | $\mathbf{1 6}$ |

CITY COLLEGE
MONTANA STATE UNIVERSITY BILLINGS

## 2015-2016 Computer Programming \& Application Development AAS <br> Plan of Study

For $\qquad$
Student I.D. Number: $\qquad$

Semester $\qquad$ Semester $\qquad$

| Course | Credits | Course | Credits |
| :--- | :--- | :--- | :--- |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
| Total |  | Total |  |

Semester: Fall $\qquad$ Semester: Spring $\qquad$

| 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 | COMX 106 | 3 |  |
| Total | 3 | Total |  |

Semester: Fall

| 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: $\qquad$
Number of credits left to earn for degree: $\qquad$
CERTIFICATION: The courses listed are required for the student's degree.
Advisor's Signature: $\qquad$ Date: $\qquad$

Student’s Signature: $\qquad$ Date: $\qquad$

