



TRANSFER ADVISING SHEET



School of Engineering & Applied Sciences

Computer Science BS

Montgomery College Associate of Science Degree in Computer Science

Catalog Year 2013-14

MC Code: 107

Purpose: The curriculum is designed to permit the student to transfer into a baccalaureate degree program in Computer Science. **The Computer Science program at UDC is accredited by Computing Accreditation Commission of ABET, Inc.**

MC Requirements		Credits	UDC Requirements		Credits
	English foundation	3	IGED -XXX	General Education	3
	Health foundation	1	NA		-
MA 181	Calculus I (MATF)	4	MATH 151&155	Calculus I (Lec/Lab)	4
	Speech foundation	3	IGED -XXX	General Education	3
	Arts distribution	3	NA		-
	Humanities distribution, philosophy based logic or ethics course recommended	3	IGED -XXX	General Education	3
	Arts or humanities distribution	3	IGED -XXX	General Education	3
	Behavioral and social sciences distribution*	3	IGED -XXX	General Education	3
	Behavioral and social sciences distribution *	3	NA		-
	Natural sciences distribution with lab	4		Natural Science Elective (Lec+Lab)	4
	Natural sciences distribution without lab	3		Math/Science Elective	3
CS 103	Computer Science I	4	IGED-250	Discovery Technology	3
CS 204	Computer Science II	4	CSCI-241	Data Structure	3
CS 256	Introduction to Discrete Structures	4	MATH 213	Discrete Math	3
EN 101	Techniques of Reading and Writing I†	3	IGED 111	Foundation Writing II	3
MA 182	Calculus II	4	MATH 152&156	Calculus II (Lec/Lab)	4
	CS Electives ¹	8		CS Electives	9 ^a
TOTAL MC credits		60	Total equivalent UDC credits		51

* The two three-credit-hour behavioral and social sciences courses must be from different disciplines.

† EN 101, if needed, for EN 102/109 or any CS courses elective or MA282 or MA 284. Not all CS courses transfer to all institutions. Please consult an advisor or the transfer institution before selecting elective courses.

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^a (CS Electives): Most CS Electives at MC can be transferred to UDC. However, credit hours and covered topics should be matched. This mapping procedure (CS Electives) needs to be performed by an academic advisor at UDC. A possible mapping for CS Electives is shown below.

Electives

MC Electives		Credits	UDC Mapping		Credits
CS 110	COMPUTER CONCEPTS	3	APCT 115	Foundations of Computing [†]	3
CS 136	SYSTEMS ANALYSIS & DESIGN	3			
CS 140	INTRO TO PROGRAMMING	3	APCT 110/111	Intro to Programming (Lec+Lab) [‡]	3
CS 140HC	INTRO TO PROGRAMMING-HONORS	3			
CS 140HM	INTRO TO PROGRAMMING-HONORS	3			
CS 206	SPECIAL TOPICS COMP SCIENCE	1-3	CS Electives*		3
CS 206CC	PL/SQL USING ORACLE	3	NA		-
CS 210	COMPUTER SECURITY	3	CSCI 353	Information Security	3
CS 215	VISUAL PROGRAMMING	3	CSCI 490	Special Topics	3
CS 216	UNIX/LINUX OPERATING SYSTEM	3	CSCI 315	Unix and System Programming [‡]	3
CS 220	CLIENT-SERVER PROGRAM W/ JAVA	3	CMOP 235	Intro to WebPage Development and HTML (Lec+Lab)	3
CS 224	WEB APPL USING C# AND ASP.NET	3	CSCI 490	Special Topics	3
CS 226	INTRO TO OBJ ORIENT PROG C++	3	APCT 231/233	Computer Science I (Lec+Lab) [≠]	4
CS 249	ADV OBJ ORIENTED PROG C++	3	APCT 232/234	Computer Science II (Lec+Lab) [≠]	4
CS 253	UNIX/LINUX SYSTEM ADMIN	4	CSCI 315	Unix and System Programming [‡]	3
CS 261	MOBILE GAME & APP PROGRAMMING	3	CSCI 490	Special Topics	3
CS 269	COMPUTER SCIENCE INTERNSHIP	1-4	NA		-
CS 270	INTRO TO SQL USING ORACLE	3	CSCI 452	Database Systems Design	3
TOTAL MC credits		45-50	Total equivalent UDC credits		41

* Transferring the special topics in CS (CS 206) at MC will be determined at UDC by an academic advisor (for transferring courses, credit hours and covered topics should be matched).

[†] Only one MC course (either CS 110 or CS 136) can be mapped to "APCT 115 Foundations of Computing."

[‡] Only one MC course (either CS 140, CS 140HC, or CS 140HM) can be mapped to "APCT 110/111 Intro to Programming (Lec+Lab)."

[≠] Although there are credits mismatch, the MC courses (CS 226 and CS 249) are going to mapped to 4credits UDC courses (APCT 231/233 and APCT 232/234, respectively) because required topics are also covered in the required MC courses (CS 103 and CS 204).

Additional Requirements at UDC

Additional UDC Courses for BS Computer Science					
IGED-270 or IGED-140*	Discov. Loc/Glob Cul Diversity or Foundations Ethics and Values	3	CSCI 325	Organization of Programming Language	3
IGED-280*	Discovery CIVIC/Ser/Teamwork	3	CSCI 311/313	Computer Organization (Lec+Lab)	4
PHIL 105 [‡]	Introduction to Logic	3	CSCI 341	Software Engineering	3
	Natural Science Elective (Lec+Lab)	4	CSCI 351	Computer Networks	3
	Natural Science Elective (Lec+Lab)	4	CSCI 410	Theory of Computing	3
MATH 225	Linear Algebra	3	CSCI 412	Operating Systems	3
MATH 381	Probability and Statistics	3	CSCI 415	Computer Architecture	3
APCT 110/111 [†]	Intro to Programming (Lec+Lab)	3	CSCI 452	Database Systems Design	3
APCT 115	Foundations of Computing	3	CSCI 495	Senior Seminar	1
CMOP 235/236	Intro. to WebPage Development and HTML (Lec+Lab)	3	CSCI 498	Senior Project I	2
APCT 231/233	Computer Science I (Lec+Lab)	4	CSCI 499	Senior Project II	3
APCT 232/234	Computer Science II (Lec+Lab)	4		CS Elective+	6 – 15 [≠]
TOTAL Additional credits					66 – 86

* All students are required to take two general education requirement courses (among IGED-140, IGED-270, and IGED-280). If the student took a Philosophy course (other than logic) or Ethics course, IGED-270 and IGED-280 need to be taken. Otherwise, the student needs to take IGED-140 and IGED-280.

‡ If the student did not take a Philosophy (logic or intro. to logic) course, it is required to be taken.

† If the student took any programming course, this course (APCT 110/111) is not required. However, the student needs to take any elective course (3 credits) to meet the minimum requirements for graduation.

≠ Required CS electives are going to be determined by looking at all the courses (including electives) taken at MC. For instance, if all the taken electives at MC are mapped to UDC CS Electives, only 2 CS electives (6 credits) are required. A detailed discussion needs to be performed with an academic advisor at UDC.