



**Transfer Guide for  
University of Montana - Helena  
College of Technology**

Information contained within this guide is taken from the 2006-2007 University of Montana - Helena College of Technology catalog and the 2006-2007 Carroll College catalog.

Questions or comments regarding this Transfer Guide can be directed to the Office of Admission, Carroll College, Helena, MT 59625 (800) 992-3648 or (406) 447-5481.

January 2007

## Transfer Admission

Carroll welcomes applications from students whose educational interests will be best served by transferring from other two-year or four-year colleges. Students are considered transfer students if they have completed one or more terms at a regionally accredited college or university. Transfer students may enter in either the fall or spring semester.

Accepted candidates are those who, in the view of the admission committee, are likely to become successful members of the Carroll community and demonstrate a strong academic background. For that reason, a selective admission policy is practiced. Transfer students should have a minimum 2.50 cumulative college grade point average (4.0 scale) to be considered for admission.

A transfer student must submit the following materials:

1. The application form, all items completed.
2. Official transcripts from all colleges previously attended, and official transcripts from high school if the student has completed fewer than 30 semester credits, or the equivalent, at the college level.
3. ACT, or SAT test scores if the student has completed less than 30 semester credits, or equivalent, at the college level. ASSET or COMPASS test scores are used for students who have been out of high school for more than three years.
4. Letter of recommendation.
5. Application fee of \$35.00 (non-refundable).

Apply free online at [www.carroll.edu/prostudents/](http://www.carroll.edu/prostudents/).

To facilitate the transition between colleges, each transfer student is assigned to an academic advisor. New students are encouraged to meet with their advisor during the first week of the semester in which they enroll. The academic advisor will discuss and arrange the student's program of study, taking into account previous college work, future goals, and Carroll College's academic requirements. New students are encouraged to attend an Open House program or meet with the transfer admission coordinator to register for their first semester of enrollment.

Carroll College follows a rolling admission policy, whereby applications are reviewed as they are submitted and admission decisions are made at the time the application file is complete.

The application deadline for fall semester is June 1st and all supporting materials (transcripts, test scores, etc.) must be on file no later than July 1st. The admission deadline for spring semester is November 15<sup>th</sup> and all supporting materials must be on file no later than December 1st.

The offer of admission to transfer students is contingent upon the successful completion of all collegiate course work in progress at the time of acceptance.

## **Acceptance into a Major Program**

Acceptance into the College by the Office of Admission does not guarantee acceptance into a major program of study. Criteria for acceptance into a particular program can be obtained by referring to the appropriate section of the current Carroll College catalog.

## **Enrollment Reservation (Advance Deposit)**

Upon receiving notification of admission, all admitted students must submit an enrollment reservation of \$300 and a completed enrollment reservation form to confirm their intent to enroll at the college. \$200 of the enrollment reservation fee acts as a deposit for miscellaneous charges (i.e. library fines, damage fines) while enrolled at Carroll and will be refunded to the student upon graduation or termination of studies if the student account is clear of all charges. The remaining \$100 is credited towards tuition in the fall or spring semester depending on the intended semester of enrollment.

Students admitted for the fall semester must submit the enrollment reservation fee and form by May 1st or within thirty days of acceptance, thereafter, to confirm their intent to enroll at the college. The fee is non-refundable after May 1st. For spring semester, to confirm intent to enroll, admitted students must submit the enrollment reservation fee and form by December 15th. The fee is non-refundable after that date.

Although the enrollment reservation fee is non-refundable if submitted after May 1st for the fall semester and December 15th for the spring semester, it can be applied to either semester within one full academic year following the original application to enroll if the student chooses to defer enrollment.

## Transfer of Credit

The following criteria will be used to determine whether or not a course from the University of Montana-Helena College of Technology will be accepted for transfer credit at Carroll:

1. The student must have received at least a "C" or 2.00 grade in the course;
2. The course must be academic in nature;
3. A maximum of 60 lower-level credits (100-200 level) may be transferred into Carroll College. Exceptions require the approval of the Vice President for Academic Affairs;
4. At least one-half of the credits required in the major field or the area of concentration must be taken at Carroll;
5. Of the final forty (40) semester credits earned toward the baccalaureate or associate degree, a minimum of thirty (30) semester credits must be earned at Carroll College;
6. Only two (2) semester hours or the equivalent in Physical Education activity courses (e.g., swimming, skiing, etc.) are transferable;
7. Courses taken on a pass/fail basis will not be accepted into the major or area of concentration. No more than four (4) such courses will be allowed toward graduation, whether they are taken at another institution or at Carroll;
8. Students who have taken courses abroad must take a corresponding examination in order to receive credits;
9. No credits will be given for any examination with less than a "C" or a 2.00 grade in a course taken abroad;
10. Students are responsible for sending an original copy of their foreign transcripts directly to the Registrar's Office.

# Bachelor of Arts Degree

To earn a Bachelor of Arts degree from Carroll College, the following requirements must be met:

1. Completion of the Carroll College Core Curriculum (CORE) for the Bachelor of Arts degree.
2. Completion of all program requirements in the major and minor (if one is taken).
3. Completion of 122 semester credits, only two (2) of which may be physical education activity courses (HPE 101-102).
4. Achievement of a cumulative 2.0 grade point average in:
  - a. All courses taken
  - b. The requirements in the major taken as a unit
  - c. The requirements in the minor taken as a unit
  - d. The CORE taken as a unit.

## Core Curriculum Bachelor of Arts Degree

**I. Foundations:** 13 credits to be completed in the first 45 semester hours at Carroll College

LAS 101 Alpha Seminar.....	3 credits
(Required of all first-year students in the fall semester)	
TH 101 Theological Foundations.....	3 credits
ENWR 102 College Composition.....	4 credits
CO 101 Basic Communication.....	3 credits

**II. Areas of Knowledge:** 30-31 credits

Fine Arts.....	3 credits
History.....	3 credits
Literature.....	3 credits
Mathematics.....	3 credits
Natural Science (lab course required).....	3-4 credits
Philosophy.....	6 credits
Social Science.....	6 credits
Theology.....	3 credits
(TH 101 may not be used to fulfill this requirement)	

**III. Writing-Intensive Requirement (WI):** Two courses

**V. Diversity Requirement:** Two courses/experiences (one from A and B)

- A. Global Diversity—approved study abroad/course that meets criteria
- B. National Diversity—approved experiential learning opportunity or course that meets criteria

# Carroll College Core Curriculum

HCOT Course	Course Name	Carroll Equivalency
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## I. Foundations

### LAS 101 Alpha Seminar

(This requirement may be waived if 2 full-time semesters of college level coursework have been completed at the time of transfer)

**TH 101 Theological Foundations:** No equivalent course available

### EN 102 College Composition:

ENG 121	English Composition (3).....	ENWR 102
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### CO 101 Basic Communication:

COM 131	Introduction to Public Speaking (3).....	CO 101
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## II. Areas of Knowledge

### Fine Arts

FA 101	Art Appreciation (3).....	ART 110
FA 120	Introduction to the Theater (3).....	THT 118
FA 140	Art Fundamentals (3)	
FA 212	Basic Drawing (3).....	ART 212
FA 222	Basic Design (3)	

### History

HIS 150	The History of Montana (3).....	HI 231
HIS 170	History of the American West (3).....	HI 424
HIS 201	U.S. History, Settlement to Reconstruction (3).....	HI 221
HIS 202	U.S. History, Reconstruction to Present (3).....	HI 222
HIS 205	U.S. History, Post World War II (3)	

### Literature

ENG 201	Approaches to Literature (3)	
ENG 210	American Literature (3)	
ENG 211	Irish Literature (3)	
ENG 221	Comparative Literature (3)	
ENG 225	Introduction to the Novel (3)	
ENG 226	Introduction to Scottish Literature (3)	
ENG 230-240	Special Topics (3)	
ENG 251	British Literature: Pre-1800 (3)	
ENG 252	British Literature: 1800 - Present (3).....	ENLT 343

### Mathematics

MA 108	College Algebra (3).....	MA 117
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HCOT Course	Course Name	Carroll Equivalency
MA 110	Probability and Linear Mathematics (3) .....	MA 105
MA 112	College Trigonometry (3).....	MA 112
MA 120	Calculus I (4).....	MA 121
MA 121	Calculus II (4).....	MA 122
MA 220	Statistics (3).....	MA 207

**Natural Science** (Lab Course Required)

SCI 101	Biology I with Lab (4).....	BI 102
SCI 104	Physics I with Lab (4)	
SCI 150	Chemistry I with Lab (4).....	CH 111
SCI 201	General Biology II with Lab (4)	
SCI 203	Physical Science II & Lab (4)	
SCI 207	Anatomy & Physiology I with Lab (4).....	BI 201*
SCI 208	Anatomy & Physiology II with Lab (4).....	BI 202*
SCI 210	Astronomy with Lab (4).....	AS 102
SCI 211	Physical Geology & Lab (4)	
SCI 220	Microbiology (3)	
SCI 250	Chemistry II & Lab (4).....	CH 112

\*NOTE: Successful completion of SCI 207 & 208 with a grade of B or better will transfer as BI 201 & 202

**Social Science**

BUS 250	Contemporary Economics (3).....	EC 106
ECON 255	Microeconomics (3).....	EC 201
ECON 256	Macroeconomics (3).....	EC 202
SS 101	Introduction to Sociology (3).....	SO 101
SS 110	Introduction to Anthropology (3).....	AN/SO 204
SS 111	Introduction to Psychology (3).....	PSY 105
SS 121	Organizational Psychology (3)	
SS 215	Introduction to Marriage and Family (3).....	AN/SO 208
SS 220	Social Psychology (3).....	PSY/SO 216
SS 223	Abnormal Psychology (3).....	PSY 306
SS 225	Native American Culture (3).....	AN/SO 218
SS 226	Developmental Psychology (3) .....	PSY 203
SS 230	Social Problems (3).....	SO 200
SS 235	Aging & Society (3).....	SO 291

**Philosophy**

PHIL 101	Ethics (3).....	PHIL 107
PHIL 187	Introduction to Consciousness Studies (3)	
BUS 205	Business Ethics (3).....	PHIL 207

**Theology**

(No equivalent courses available)

**HCOT Course**                      **Course Name**    **Carroll Equivalency**

**III. Writing-Intensive Requirement (WI):** Two Courses Required

ENG 122	Advanced English Composition (3)	
ENG 222	Introduction to Creative Writing (3).....	ENWR 264

**IV. Diversity Requirement:** Two courses/experiences required (one from A & B)

**A. Global Diversity:** Approved study abroad or course

**B. National Diversity:** Approved experiential learning opportunity or course

## Transferable Courses (Do not fulfill Core Curriculum)

NOTE: Although the following courses will transfer to Carroll College, fulfillment of departmental requirements are at the discretion of the individual department.

HCOT Course	Course Name	Carroll Equivalency
AC 110	Accounting I (4)	
AC 120	Accounting II (4)	
AC 135	Income Tax (3)	
AC 140	Payroll Accounting (3)	
AC 205	Computerized Accounting (3)	
AC 210	Principles of Financial Accounting (3).....	BA 203
AC 220	Principles of Managerial Accounting (3).....	BA 204
AC 230	Intro. to Statewide Budgeting & Accounting System (SBAS) (2)	
AC 231	Governmental and Non-Profit Accounting (3)	
AC 265	Accounting Portfolio (2)	
AF 130	Basic Aerodynamics (2)	
BUS 105	Introduction to Business (3).....	BA 100
BUS 200	Small Business Entrepreneurship (2)	
BUS 210	Marketing (3)	
BUS 246	Business Law I (3)	
BUS 247	Business Law II (3)	
BUS 260	Management (3)	
BUS 261	Human Resource Management (3)	
BUS 263	Legal Issues in Human Resources (3)	
BUS 265	Finance (3)	
BUS 270	Business Plan (2)	
COM 132	Interpersonal Communications (1)	
COM 133	Small Group Communications (1)	

NOTE: For Computer technology (CT) Courses listed below, please contact Carroll College's Computer Science Department for equivalent courses and look at the articulation agreement at the end of this document.

CT 101	Introduction to Computer Technology (2).....	CS 101
CT 102	Introduction to Programming (2)	
CT 115	Web Pages (3)	
CT 119	Introduction to Unix (2)	
CT 121	Perl Scripting for Administration (2)	
CT 131	Visual Basic (4)	
CT 161	Web Page Graphic Design (3)	
CT 180	Web Server Administration (2)	
CT 181	Client Side Web Development (2)	
CT 210	Project Management (2)	
CT 216	Introduction to Object Oriented Programming (4)	
CT 217	Advanced Java (4)	
CT 218	Operating System and Web Administration (4)	
CT 219	UNIX (4)	
CT 251	LAN Operating Systems (4)	
CT 253	Developing Web Applications (4)	
CT 254	Database Design and SQL (4)	
CT 260	Systems Analysis and Design (3)	

HCOT Course	Course Name	Carroll Equivalency
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CT 262	Web Databases (4)	
CT 264	PL/SQL Oracle Developer (4)	
CT 266	Network Administrator Seminar (3)	
CT 268	Advanced .NET Applications (3)	
CT 270	Oracle Enterprise Applications (4)	

EL Carroll College will accept up to 10 credits of Electronics Technology as transferable elective credits.

ENG 101	Basic College Writing (3).....	ENWR 101
ENG 104	Workplace Communication (2)	
ENG 107	Technical Communication (3)	
ENG 117	Effective Business Communication (3)	
GA 105	Basic Electricity (2)	
GEN 265	A.S. Capstone (2)	
GEN 270	A.A. Capstone (2)	
GEN 287	Independent Study (1-3)	
HE 112	Nutrition (3) .....	NU 208
HR 100	Human Relations (2)	
HR 101	College Success (2)	
HR 110	Career Development & Human Relations (3)	
MA 100	Intermediate Algebra (4)	
MAT 100	Introduction to Technical Math (1)	
MAT 105	Technical Math Extended (4)	
MAT 110	Technical Math (3)	
MAT 112	Technical Math for Carpentry (2)	
MAT 120	Applied Business Math (3)	
NURS 100	Introduction to Nursing and Health Care (2)	
NURS 110/111	Pharmacology, Calculations and Administration (4)*	
NURS 112	Pharmacology II (3)	
NURS 120/121	Basic Skills and Fundamentals (3)*	
NURS 127	Adult Nursing Across the Lifespan I (4)	
NURS 130	Childbearing Family/Children's Needs (3)	
NURS 137	Adult Nursing Across the Lifespan II (4)	
NURS 139	Nursing Trends, Issues, Preceptorship (3)	
NURS 225	Mental Health Nursing (3).....	NU 302* may meet req.
NURS 226	Current Trends and Issues in Registered Nursing (2).....	NU 101
NURS 230	Advanced Childbearing Family/Children's Needs (4).. .....	NU 301
NURS 237	Advanced Adult Nursing Across the Lifespan (4).....	NU 304
NURS 239	Management, Ethics, Internship (3) .....	NU 406* may meet req.

**\*Note:** Completion of NURS 110/111 & NURS 120/121 will fulfill Carroll's NU 201  
**Note:** Nursing students are encouraged to contact Cynthia Gustafson (447-5494) Chair of the nursing program at Carroll College for case by case evaluation of nursing transfer credits.

OT 112	Introduction to Microcomputers .....	CS 101
OT 134	Data Management Applications (3)*	
OT 137	Spreadsheets Applications (3)*	

HCOT Course	Course Name	Carroll Equivalency
OT 138	Multimedia Presentations (2)	
OT 161	Legal Terminology (2)	
OT 170	Medical Terminology (4)	
OT 222	Exploring Legal Resources (3)	
OT 235	Family Law (2)	
OT 236	Employment Law (2)	
OT 249	Desktop Publishing (3).....	CO 108
<b>*NOTE:</b> Completion of OT 134 AND OT 137 will fulfill Carroll's CS 213		
PS 105	Emergency Medical Technician - Basic	
PS 130	Personal Physical Fitness (1).....	HPE 101
PS 220	Human Relationships in Emergency Situations (3)	
SCI 102	Introduction to Scientific Methods (3)	
SCI 130	Introduction to Environmental Studies (3)	
SCI 140	Introduction to Geographic Information Systems (GIS) (3)	
SCI 230	Nature and Society (3)	
SPA 101	Elementary Spanish (4).....	SP 101
SPA 102	Elementary Spanish II (4).....	SP 102

## Carroll College CS and UM/H COT Articulation Agreement

This articulation agreement is based on the 2006-07 catalogs at UM/Helena COT and Carroll College. Any deviations from these catalogs (other catalogs, waivers, transfers, etc...) will be reviewed on a case by case basis using Carroll's standard procedures.

### Notes and Issues

Bold items are areas where content significantly differs between requirements

UMH diversity requirements are anticipated to meet 1 of Carroll's, but will be decided on a case by case basis

EN325 will meet the major WI requirement when CS230 is not required. Another WI is required.

For UMH AAS degree, all gen ed classes must be transferrable (not tech math, eng or HR110).

For UMH AS degree:

Only Com131, no other Com classes, will be accepted as a CS or CORE requirement

Spanish will meet Carroll's Global Diversity requirement, but no other CORE requirement.

Only Eng121-122, no other writing classes, will be accepted as CS or CORE req.

Carroll CORE requires only one class each from in FA, HIS and Literature

The 2 semester Calc sequence (thru Ma122) is required for full Math transfer

The CS classes accepted will depend on the class choices made by the UM/H student.

Please contact the Carroll College Computer Science Department for more information on this articulation agreement.

**Carroll CS Degree**

**UMH - AS - Networking**

	CR		T	R
CS110 Intro to CS - Prog (Java)	4			4
CS120 Data Structures (Java)	4			4
CS 230 Software Engineering	4	<b>EI126/176 Network Fund (2)/Router Fund (2)</b>	4	0
CS309 Computer Architecture	4			4
CS310 Computer Databases (Oracle)	4	Ct254 Sql/Pl/Sql		4
CS389 Computer DB II (Oracle/Open	4			4
CS430 Senior Project	4	<b>Ct218 Os and Web Server Admin</b>	4	0
CS495 Senior Seminar	3			3
CS201 Web Design	3			3
CS202 Web Programming	3	<b>Ct121 Perl (2), Ct102 Intro to Prog (1)</b>	3	0
CS330 Computer Networks I	4	EI176/227 Routing & Switching (3)/Router Fund (1)	4	0
CS331 Computer Networks II	4			4
CS403 Cryptography	4			4
CS410 Operating Systems	4	Ct 219 Unix or Ct254 LanOS	4	0
CS421 Network Security	4			4
co206 Small Group Communication	3			3
en325 Technical Writing	3			3
ma131 Calc of Single Variable Func	4	Ma 121 Calc II	4	0
ma328 Discrete Math	3			3
Electives	11	Ma/SCI classes (7), Eng122 (2), GE265 Capstone(2)	11	0
las101 Alpha Sem(elec for transfer)	3	EI126 Net Fund (1), Ct 102 Intro to Prog (1), Ct elec (1)	3	0
th101 Theological Foundations	3			3
enwr102 English Comp	4	Eng 121/122, Eng Comp (3) and Adv Eng Comp (1)	4	0
co101 Basic Communication	3	Com131 Intro to Public Speaking	3	0
Fine arts	3	Any Fa class	3	0
History	3	Any His class	3	0
Math - met by Major	0			0
Literature	3	Any Eng 200 class or greater (except Creative Writing)		3
Science(lab)	4	Any SCI class with lab	4	0
Philosophy	6			6
Social Science	6	Any 2 SS or Econ classes	6	0
Theology	3			3
2 writing intensive	0	Need one, En325 fulfills major req.		0
2 Diversity(1 global, 1 national)	0	one covered		0
<b>Total</b>	<b>122</b>		<b>60</b>	<b>62</b>

**Carroll CS Degree**

**UMH AS - Programming**

		CR			T	R
CS110	Intro to CS - Prog (Java)	4	Ct216	Obj. Programming (Java)	4	0
CS120	Data Structures (Java)	4	Ct217	Adv Obj Prog. (Java)	0	4
CS 230	Software Engineering	4	Ct270	Oracle Ent. Prog or Ct260 SA & Ct102 (1)	4	0
CS309	Computer Architecture	4				4
CS310	Computer Databases (Oracle)	4	Ct254	Sql/Pl/Sql	4	0
CS389	Computer DB II (Oracle/Open)	4				4
CS430	Senior Project	4	Ct262	Web Databases	0	4
CS495	Senior Seminar	3	<b>Ct268</b>	<b>Adv .Net Prog</b>	3	0
CS201	Web Design	3				3
CS202	Web Programming	3	Ct253	Web applications	3	0
CS330	Computer Networks I	4				4
CS331	Computer Networks II	4	<b>Ct131 Visual Basic (3) &amp; Ct102 Intro to Prog (1)</b>		4	0
CS403	Cryptography	4				4
CS410	Operating Systems	4				4
CS421	Network Security	4				4
co206	Small Group Communication	3				3
en325	Technical Writing	3				3
ma131	Calc of Single Variable Func	4	Ma 121	Calc II	4	0
ma328	Discrete Math	3				3
	Electives	11	Ma/SCI classes (7), Eng122 (2), GE265 Capstone(2)		11	0
las101	Alpha Sem(elec for transfer)	3			0	3
th101	Theological Foundations	3				3
enwr102	English Comp	4	Eng 121/122, Eng Comp (3) and Adv Eng Comp (1)		4	0
co101	Basic Communication	3	Com131	Intro to Public Speaking	3	0
	Fine arts	3	Any Fa class		3	0
	History	3	Any His class		3	0
	Math - met by Major	0				0
	Literature	3	Any Eng 200 class or greater (except Creative Writing			3
	Science(lab)	4	Any SCI cl:		4	0
	Philosophy	6				6
	Social Science	6	Any 2 SS or Econ classes		6	0
	Theology	3				3
	2 writing intensive	0	Need one, En325 fulfills major req.			0
	2 Diversity(1 global, 1 national)	0	one covered			0
<b>Total</b>		<b>122</b>			<b>60</b>	<b>62</b>

**Carroll CS Degree**

**UMH - AS Webmaster**

Carroll CS Degree		CR	UMH - AS Webmaster		T	R
CS110	Intro to CS - Prog (Java)	4	Ct216	Obj. Programming (Java)	4	0
CS120	Data Structures (Java)	4	Ct217	Adv Obj Prog. (Java)	0	4
CS 230	Software Engineering	4				4
CS309	Computer Architecture	4				4
CS310	Computer Databases (Oracle)	4	ct254	Sql/Pl/Sql	4	0
CS389	Computer DB II (Oracle/Open)	4	<b>Ct 262</b>	<b>Web Databases</b>		4
CS430	Senior Project	4	<b>Ct227 PHP/Ct 181 Client web (1)</b>		4	0
CS495	Senior Seminar	3				3
CS201	Web Design	3				3
CS202	Web Programming	3	Ct 253	Web Applications	3	0
CS330	Computer Networks I	4				4
CS331	Computer Networks II	4	<b>Ct 131 Visual Basic (3)/Ct 181 Client Web (1)</b>		4	0
CS403	Cryptography	4				4
CS410	Operating Systems	4				4
CS421	Network Security	4				4
co206	Small Group Communication	3				3
en325	Technical Writing	3				3
ma131	Calc of Single Variable Func	4	Ma 121	Calc II	4	0
ma328	Discrete Math	3				3
	Electives	11	Ma/SCI classes (7), Eng122 (2), GE265 Capston		11	0
las101	Alpha Sem(elec for transfer)	3	Ct 119 Unix (2) and Ct 102 Intro to Prog (1)		3	0
th101	Theological Foundations	3				3
enwr102	English Comp	4	Eng 121/122, Eng Comp (3) and Adv Eng Comp		4	0
co101	Basic Communication	3	Com131	Intro to Public Speaking	3	0
	Fine arts	3	Any Fa class		3	0
	History	3	Any His class		3	0
	Math - met by Major	0				0
	Literature	3	Any Eng 200 class or greater (except Creative W			3
	Science(lab)	4	Any SCI cl:		4	0
	Philosophy	6				6
	Social Science	6	Any 2 SS or Econ classes		6	0
	Theology	3				3
	2 writing intensive	0	Need one, En325 fulfills major req.			0
	2 Diversity(1 global, 1 national)	0	one covered			0
<b>Total</b>		<b>122</b>			<b>60</b>	<b>62</b>

**Carroll Cs**

**UMH - AAS Networking**

	CR					
CS110	Intro to CS - Prog (Java)	4		4		
CS120	Data Structures (Java)	4		4		
CS 230	Software Engineering	4	Ct218	<b>Os and Web Server Administration</b>	4	0
CS309	Computer Architecture	4			4	
CS310	Computer Databases (Oracle)	4	<b>OT134</b>	<b>DB Mgmt and Ct??? Intro to Perl (1)</b>	4	0
CS389	Computer DB II (Oracle/Open)	4	<b>Ct251</b>	<b>Lan OS</b>	4	0
CS430	Senior Project	4			4	
CS495	Senior Seminar	3	Ct266	Net. Seminar	3	0
CS201	Web Design	3	Ct115/???	Web Pages and Intro to Perl (1)	3	0
CS202	Web Programming	3			3	
CS330	Computer Networks I	4	EI126/127	Routing and Swithing (2) and Router Fund (2)	4	0
CS331	Computer Networks II	4	EI227/276	Routing and Swithing (1) and WAN (3)	4	0
CS403	Cryptography	4			4	
CS410	Operating Systems	4	Ct219	Unix	4	0
CS421	Network Security	4	Ct24x	Web Server Security	4	0
co206	Small Group Communication	3			3	
en325	Technical Writing	3			3	
ma131	Calc of Single Variable Func	4			4	
ma328	Discrete Math	3			3	
	Electives	11	EI242	Pc Trouble (4)/EI126/176 Cisco 1/2(4)/Bus105 Intro to	11	0
las101	Alpha Sem(elec for transfer)	3	CT101	Intro to Ct (1), Ct 102 Intro to Prog (2)	3	0
th101	Theological Foundations	3			3	
enwr102	English Comp	4	Eng121*	English Composition	3	1
co101	Basic Communication	3	Com 131*	Intro to Public Speaking	3	0
	Fine arts	3			3	
	History	3			3	
	Math - met by Major	0			0	
	Literature	3			3	
	Science(lab)	4			4	
	Philosophy	6	Ph101*	Intro to Philosophy or Business Ethics	3	3
	Social Science	6	Ss101*	Intro to Sociology	3	3
	Theology	3			3	
	2 writing intensive	0			0	
	2 Diversity(1 global, 1 national)	0			0	
<b>Total</b>		<b>122</b>			<b>60</b>	<b>62</b>
<b>Credits Not applied to Cs Degree</b>		ma100	int. algebra		3	
	###		Electives		7	

**Carroll Cs**

**UMH AAS Programming**

	CR		T	R
CS110 Intro to CS - Prog (Java)	4	ct216 Obj Programming (Java)	4	0
CS120 Data Structures (Java)	4	ct217 Adv Obj Programming (Java)	4	0
CS 230 Software Engineering	4	ct260 Systems Analysis (3)/Ct 210 Proj Mgmt (1)	4	0
CS309 Computer Architecture	4			4
CS310 Computer Databases (Oracle)	4	ct254 Sql/Pl/Sql	4	0
CS389 Computer DB II (Oracle/Open)	4	ct264 <b>Oracle Developer</b>	4	0
CS430 Senior Project	4	ct26? Oracle Enterprise Applications	4	0
CS495 Senior Seminar	3	ct262 Web Databases	3	0
CS201 Web Design	3			3
CS202 Web Programming	3	ct253 Web Applications	3	0
CS330 Computer Networks I	4			4
CS331 Computer Networks II	4	ct26? <b>Adv .Net Prog. (3)/Ct 210 Proj Mgmt (1)</b>	4	0
CS403 Cryptography	4			4
CS410 Operating Systems	4			4
CS421 Network Security	4			4
co206 Small Group Communication	3			3
en325 Technical Writing	3			3
ma131 Calc of Single Variable Func	4			4
ma328 Discrete Math	3			3
Electives	11	EI242PcTr(4)/Ct131VB(3)/Ct210(1),Ct115(2),Ct262(1)	11	0
las101 Alpha Sem(elec for transfer)	3	Ct101 Intro to CT(1), Ct102 Intro to Prog (2)	3	0
th101 Theological Foundations	3			3
enwr102 English Comp	4	Eng12 English Composition	3	1
co101 Basic Communication	3	Com 1 Intro to Public Speaking	3	0
Fine arts	3			3
History	3			3
Math - met by Major	0			0
Literature	3			3
Science(lab)	4			4
Philosophy	6	Ph101 Intro to Philosophy or Business Ethics	3	3
Social Science	6	Ss101 Intro to Sociology	3	3
Theology	3			3
2 writing intensive	0			0
2 Diversity(1 global, 1 national)	0			0
<b>Total</b>	<b>122</b>		<b>60</b>	<b>62</b>
<b>Classes with no credit in CS degree:</b>		ma100int algebra		3
###		Ot134 access		3
#REF!		Elec		4

**Carroll Cs**

**UMH AAS - Webmaster**

	CR			
CS110	4	Ct216	Obj Programming (Java)	4 0
CS120	4	Ct217	Adv Obj Programming (Java)	4 0
CS 230	4	Ct260	Proj Mgmt/php (1)	4 0
CS309	4			4
CS310	4	Ct254	Sql/Pl/Sql	4 0
CS389	4			4
CS430	4	Ct262	<b>web databases</b>	4 0
CS495	3			3
CS201	3	Ct161	Web graphics (2)/ Ct 2?? Php (1)	3 0
CS202	3	Ct253	Web Applications	3 0
CS330	4			4
CS331	4	Ct26?	<b>Adv .Net Apps/Ct 2?? Php (1)</b>	4 0
CS403	4			4
CS410	4	Ct? Unix	Unix/Ct 2?? Web Server Admin	4 0
CS421	4			4
co206	3			3
en325	3			3
ma131	4			4
ma328	3			3
Electives	11	EI242	PcTrouble(4)/Ct131 VB(3)/Ct2? Client Dev(2),Ct111	11 1
las101	3	Ct102	Intro to Prog(2),CT101 Intro to Ct(1)	3 0
th101	3			3
enwr102	4	Eng121*	English Composition	3 0
co101	3	Com 131	Intro to Public Speaking	3 0
Fine arts	3			3
History	3			3
Math - met by Major	0			0
Literature	3			3
Science(lab)	4			4
Philosophy	6	Ph101*	Intro to Philosophy or Business Ethics	3 3
Social Science	6	Ss101*	Intro to Sociology	3 3
Theology	3			3
2 writing intensive	0			0
2 Diversity(1 global, 1 national)	0			0
<b>Total</b>	<b>122</b>			<b>60 62</b>

**Classes with no credit for CS degree:**

ot134	access	3
ma100	int. algebra	3
	Elec	4