

ACADEMIC CATALOG ADDENDUM

**Heald College
Catalog Addendum
Effective April 2002**



ACCOUNTING

Course List

	Diploma	Associate in Applied Science Degree
Major Courses	21 Units	36 Units
A105 Accounting Fundamentals with Computer Applications	7	7
A201 Accounting Principles I	7	7
A202 Accounting Principles II	7	7
A203 Income Tax Accounting		7
A204 Managerial Accounting		4
A210 Accounting Internship or Substitution		4
Business Courses	41 Units	48 Units
B103 Business Law	4	4
B205 Economics		4
C112 Introduction to Information Technology	4	4
D104 Introduction to Software Applications	3	3
D121 Spreadsheet Applications	3	3
D221 Database Management		3
E010 Essential Language Skills	3	3
E020 Dynamic Communications	3	3
E225 Business Writing	4	4
G050 Integrated Learning	3	3
M010 Essential Math	3	3
M101 Math Principles	5	5
S101 Keyboarding	3	3
W101 Word Processing Essentials	3	3
General Education Courses	7 Units	27 Units
E110 Business College Composition		5
E201 Perspectives of Language and Culture		5
G201 Psychology		5
G204 Environmental Science		5
M201 Applied Mathematics	7	7
Total Required for Diploma/Degree	69 Units	111 Units
Keyboarding requirement: 40 wpm (words per minute)		
Ten-key requirement: 150 nspm (net strokes per minute)		
Recommended Substitutions for Diploma/Degree:		
B101 Business Organization and Management		4
B206 Human Resources Management		4

Recommended substitutions are for students who transfer courses from a regionally accredited institution or demonstrate proficiency for course credit.

Day & Evening Sample Programs

SAMPLE DAY PROGRAM

1st Quarter	16 Units
C112 Introduction to Information Technology	4
D104 Introduction to Software Applications	3
E010 Essential Language Skills	3
G050 Integrated Learning	3
S101 Keyboarding	3
P010 Workshop (if required)	0
2nd Quarter	16 Units
A105 Accounting Fundamentals with Computer Applications	7
E020 Dynamic Communications	3
M010 Essential Math	3
W101 Word Processing Essentials	3
P010 Workshop (if required)	0
3rd Quarter	19 Units
A201 Accounting Principles I	7
D121 Spreadsheet Applications	3
E225 Business Writing	4
M101 Math Principles	5
P010 Workshop (if required)	0
4th Quarter	18 Units
A202 Accounting Principles II	7
B103 Business Law	4
M201 Applied Mathematics	7
P010 Workshop (if required)	0
5th Quarter	21 Units
A203 Income Tax Accounting	7
B205 Economics	4
E110 Business College Composition	5
G204 Environmental Science	5
P010 Workshop (if required)	0
6th Quarter	21 Units
A204 Managerial Accounting	4
A210 Accounting Internship or Substitution	4
D221 Database Management	3
E201 Perspectives of Language and Culture	5
G201 Psychology	5
P010 Workshop (if required)	0

SAMPLE EVENING PROGRAM

1st Quarter	13 Units
C112 Introduction to Information Technology	4
D104 Introduction to Software Applications	3
G050 Integrated Learning	3
S101 Keyboarding	3
P010 Workshop (if required)	0
2nd Quarter	13 Units
A105 Accounting Fundamentals with Computer Applications	7
E010 Essential Language Skills	3
M010 Essential Math	3
P010 Workshop (if required)	0
3rd Quarter	14 Units
D121 Spreadsheet Applications	3
E020 Dynamic Communications	3
M101 Math Principles	5
W101 Word Processing Essentials	3
P010 Workshop (if required)	0
4th Quarter	15 Units
A201 Accounting Principles I	7
B103 Business Law	4
E225 Business Writing	4
P010 Workshop (if required)	0
5th Quarter	14 Units
A202 Accounting Principles II	7
M201 Applied Mathematics	7
P010 Workshop (if required)	0
6th Quarter	17 Units
A203 Income Tax Accounting	7
E110 Business College Composition	5
G204 Environmental Science	5
P010 Workshop (if required)	0
7th Quarter	16 Units
A204 Managerial Accounting	4
B205 Economics	4
D221 Database Management	3
E201 Perspectives of Language and Culture	5
P010 Workshop (if required)	0
8th Quarter	9 Units
A210 Accounting Internship or Substitution	4
G201 Psychology	5
P010 Workshop (if required)	0

BUSINESS SOFTWARE APPLICATIONS

Course List

		Diploma	Associate in Applied Science Degree
Major Courses		13 Units	32 Units
C132	Visual BASIC Programming I		4
D121	Spreadsheet Applications	3	3
D202	Graphics and Presentations Seminar		3
D220	Principles and Technologies of E-Commerce	4	4
D221	Database Management		3
D222	PC Troubleshooting and Configuration	6	6
D225	Web Page Development		3
D246	Networking		6
Business Courses		40 Units	48 Units
A105	Accounting Fundamentals with Computer Applications	7	7
B103	Business Law		4
C112	Introduction to Information Technology	4	4
D104	Introduction to Software Applications	3	3
E010	Essential Language Skills	3	3
E020	Dynamic Communications	3	3
E225	Business Writing		4
G050	Integrated Learning	3	3
M010	Essential Math	3	3
M101	Math Principles	5	5
S101	Keyboarding	3	3
W102	Word Processing	6	6
General Education Courses		17 Units	27 Units
E110	Business College Composition	5	5
E201	Perspectives of Language and Culture		5
G201	Psychology	5	5
G204	Environmental Science		5
M201	Applied Mathematics	7	7
Total Required for Diploma/Degree		70 Units	107 Units
Keyboarding requirement: 40 wpm (words per minute)			
Recommended Substitutions for Diploma/Degree:			
B101	Business Organization and Management	4	4
B205	Economics		4
B206	Human Resources Management		4
D210	Business Internship or Substitution		4

Recommended substitutions are for students who transfer courses from a regionally accredited institution or demonstrate proficiency for course credit.

Day & Evening Sample Programs

SAMPLE DAY PROGRAM

1st Quarter		16 Units
C112	Introduction to Information Technology	4
D104	Introduction to Software Applications	3
E010	Essential Language Skills	3
G050	Integrated Learning	3
S101	Keyboarding	3
P010	Workshop (if required)	0
2nd Quarter		16 Units
A105	Accounting Fundamentals with Computer Applications	7
M010	Essential Math	3
W102	Word Processing	6
P010	Workshop (if required)	0
3rd Quarter		17 Units
D121	Spreadsheet Applications	3
D222	PC Troubleshooting and Configuration	6
E020	Dynamic Communications	3
M101	Math Principles	5
P010	Workshop (if required)	0
4th Quarter		21 Units
D220	Principles and Technologies of E-Commerce	4
E110	Business College Composition	5
G201	Psychology	5
M201	Applied Mathematics	7
P010	Workshop (if required)	0
5th Quarter		18 Units
D202	Graphics and Presentations Seminar	3
D221	Database Management	3
D225	Web Page Development	3
E225	Business Writing	4
G204	Environmental Science	5
P010	Workshop (if required)	0
6th Quarter		19 Units
B103	Business Law	4
C132	Visual BASIC Programming I	4
D246	Networking	6
E201	Perspectives of Language and Culture	5
P010	Workshop (if required)	0

SAMPLE EVENING PROGRAM

1st Quarter		13 Units
C112	Introduction to Information Technology	4
D104	Introduction to Software Applications	3
G050	Integrated Learning	3
S101	Keyboarding	3
P010	Workshop (if required)	0
2nd Quarter		12 Units
E010	Essential Language Skills	3
M010	Essential Math	3
W102	Word Processing	6
P010	Workshop (if required)	0
3rd Quarter		15 Units
B103	Business Law	4
D121	Spreadsheet Applications	3
E020	Dynamic Communications	3
M101	Math Principles	5
P010	Workshop (if required)	0
4th Quarter		16 Units
D220	Principles and Technologies of E-Commerce	4
E110	Business College Composition	5
M201	Applied Mathematics	7
P010	Workshop (if required)	0
5th Quarter		14 Units
D222	PC Troubleshooting and Configuration	6
D225	Web Page Development	3
G204	Environmental Science	5
P010	Workshop (if required)	0
6th Quarter		15 Units
A105	Accounting Fundamentals with Computer Applications	7
D221	Database Management	3
E201	Perspectives of Language and Culture	5
P010	Workshop (if required)	0
7th Quarter		16 Units
C132	Visual BASIC Programming I	4
D202	Graphics and Presentations Seminar	3
E225	Business Writing	4
G201	Psychology	5
P010	Workshop (if required)	0
8th Quarter		6 Units
D246	Networking	6
P010	Workshop (if required)	0

COMPUTER BUSINESS ADMINISTRATION

Course List

		Diploma	Associate in Applied Science Degree
Major Courses		13 Units	31 Units
B101	Business Organization and Management	4	4
B205	Economics		4
B206	Human Resources Management		4
B215	Integrated Office Environments		6
D121	Spreadsheet Applications	3	3
D202	Graphics and Presentations Seminar	3	3
D210	Business Internship or Substitution		4
D221	Database Management	3	3
Business Courses		44 Units	51 Units
A105	Accounting Fundamentals with Computer Applications	7	7
C112	Introduction to Information Technology	4	4
D104	Introduction to Software Applications	3	3
D220	Principles and Technologies of E-Commerce	4	4
D225	Web Page Development		3
E010	Essential Language Skills	3	3
E020	Dynamic Communications	3	3
E225	Business Writing		4
G050	Integrated Learning	3	3
M010	Essential Math	3	3
M101	Math Principles	5	5
S101	Keyboarding	3	3
W102	Word Processing	6	6
General Education Courses		12 Units	27 Units
E110	Business College Composition	5	5
E201	Perspectives of Language and Culture		5
G201	Psychology		5
G204	Environmental Science		5
M201	Applied Mathematics	7	7
Total Required for Diploma/Degree		69 Units	109 Units
Keyboarding requirement: 50 wpm (words per minute)			
Recommended Substitutions for Diploma/Degree:			
C132	Visual BASIC Programming I	4	
D222	PC Troubleshooting and Configuration	6	

Recommended substitutions are for students who transfer courses from a regionally accredited institution or demonstrate proficiency for course credit.

Day & Evening Sample Programs

SAMPLE DAY PROGRAM

1st Quarter		16 Units
C112	Introduction to Information Technology	4
D104	Introduction to Software Applications	3
E010	Essential Language Skills	3
G050	Integrated Learning	3
S101	Keyboarding	3
P010	Workshop (if required)	0
2nd Quarter		16 Units
A105	Accounting Fundamentals with Computer Applications	7
M010	Essential Math	3
W102	Word Processing	6
P010	Workshop (if required)	0
3rd Quarter		18 Units
D121	Spreadsheet Applications	3
D202	Graphics and Presentations Seminar	3
D220	Principles and Technologies of E-Commerce	4
E020	Dynamic Communications	3
M101	Math Principles	5
P010	Workshop (if required)	0
4th Quarter		19 Units
B101	Business Organization and Management	4
D221	Database Management	3
E110	Business College Composition	5
M201	Applied Mathematics	7
P010	Workshop (if required)	0
5th Quarter		18 Units
B215	Integrated Office Environments	6
D225	Web Page Development	3
E225	Business Writing	4
G201	Psychology	5
P010	Workshop (if required)	0
6th Quarter		22 Units
B205	Economics	4
B206	Human Resources Management	4
D210	Business Internship or Substitution	4
E201	Perspectives of Language and Culture	5
G204	Environmental Science	5
P010	Workshop (if required)	0

SAMPLE EVENING PROGRAM

1st Quarter		13 Units
C112	Introduction to Information Technology	4
D104	Introduction to Software Applications	3
G050	Integrated Learning	3
S101	Keyboarding	3
P010	Workshop (if required)	0
2nd Quarter		12 Units
E010	Essential Language Skills	3
M010	Essential Math	3
W102	Word Processing	6
P010	Workshop (if required)	0
3rd Quarter		15 Units
D121	Spreadsheet Applications	3
D220	Principles and Technologies of E-Commerce	4
E020	Dynamic Communications	3
M101	Math Principles	5
P010	Workshop (if required)	0
4th Quarter		14 Units
B101	Business Organization and Management	4
D202	Graphics and Presentations Seminar	3
M201	Applied Mathematics	7
P010	Workshop (if required)	0
5th Quarter		15 Units
A105	Accounting Fundamentals with Computer Applications	7
D221	Database Management	3
E110	Business College Composition	5
P010	Workshop (if required)	0
6th Quarter		15 Units
B206	Human Resources Management	4
B215	Integrated Office Environments	6
E201	Perspectives of Language and Culture	5
7th Quarter		16 Units
B205	Economics	4
D225	Web Page Development	3
E225	Business Writing	4
G201	Psychology	5
8th Quarter		9 Units
D210	Business Internship or Substitution	4
G204	Environmental Science	5
P010	Workshop (if required)	0

COMPUTER INFORMATION TECHNOLOGY

Course List

		Diploma	Associate in Applied Science Degree
Major Courses		18 Units	35 Units
C132	Visual BASIC Programming I	4	4
C135	Operating Systems Support	6	6
C210	Applications for Computer Technicians		3
C222	Microcomputer Systems	8	8
C235	Transmission Media and Networking		6
C240	Data Communications and Networking		8
Technical Courses		31 Units	44 Units
C112	Introduction to Information Technology	4	4
C120	Customer and IT Support	3	3
D104	Introduction to Software Applications	3	3
D220	Principles and Technologies of E-Commerce		4
D221	Database Management	3	3
D222	PC Troubleshooting and Configuration	6	6
D225	Web Page Development		3
E010	Essential Language Skills	3	3
E231	Writing for the Technical Professions		4
G211	Graduation Project, Planning Phase		1
G212	Graduation Project, Completion Phase		1
K103	Introduction to Electronics	3	3
K104	Computer Electronics	3	3
M011	Algebra Essentials	3	3
General Education Courses		20 Units	25 Units
E113	Technical Composition	5	5
E201	Perspectives of Language and Culture	5	5
G102	Applied Physics	5	5
G201	Psychology		5
M113	Algebra for Computer Technicians	5	5
Total Required for Diploma/Degree		69 Units	104 Units
Recommended Substitutions for Diploma/Degree:			
A105	Accounting Fundamentals with Computer Applications		7
D121	Spreadsheet Applications		3
D202	Graphics and Presentations Seminar		3

Recommended substitutions are for students who transfer courses from a regionally accredited institution or demonstrate proficiency for course credit.

Day & Evening Sample Program

1st Quarter		16 Units
C112	Introduction to Information Technology	4
D104	Introduction to Software Applications	3
E010	Essential Language Skills	3
K103	Introduction to Electronics	3
M011	Algebra Essentials	3
2nd Quarter		17 Units
C120	Customer and IT Support	3
D222	PC Troubleshooting and Configuration	6
K104	Computer Electronics	3
M113	Algebra for Computer Technicians	5
3rd Quarter		19 Units
C135	Operating Systems Support	6
D221	Database Management	3
E113	Technical Composition	5
G102	Applied Physics	5
4th Quarter		18 Units
C132	Visual BASIC Programming I	4
C222	Microcomputer Systems	8
E201	Perspectives of Language and Culture	5
G211	Graduation Project, Planning Phase*	1
5th Quarter		17 Units
C210	Applications for Computer Technicians	3
C235	Transmission Media and Networking	6
D220	Principles and Technologies of E-Commerce	4
E231	Writing for the Technical Professions	4
6th Quarter		17 Units
C240	Data Communications and Networking	8
D225	Web Page Development	3
G201	Psychology	5
G212	Graduation Project, Completion Phase*	1

*Required for degree program only.

ELECTRONICS TECHNOLOGY

Course List

		Diploma	Associate in Applied Science Degree
Major Courses		25 Units	43 Units
K103	Introduction to Electronics	3	3
K105	Electronics Principles	6	6
K115	Electronics Circuit Analysis	8	8
K201	Solid State Systems	8	8
K215	Digital Logic and Control Systems		12
K255	Modern Data Communications		6
Technical Courses		23 Units	35 Units
C112	Introduction to Information Technology	4	4
C225	Introduction to Programming	4	4
D104	Introduction to Software Applications	3	3
D222	PC Troubleshooting and Configuration	6	6
D246	Networking		6
E010	Essential Language Skills	3	3
E231	Writing for the Technical Professions		4
G211	Graduation Project, Planning Phase		1
G212	Graduation Project, Completion Phase		1
M011	Algebra Essentials	3	3
General Education Courses		20 Units	25 Units
E113	Technical Composition	5	5
E201	Perspectives of Language and Culture		5
G102	Applied Physics	5	5
G201	Psychology	5	5
M111	Algebra	5	5
Total Required for Diploma/Degree		68 Units	103 Units

Day & Evening Sample Program

1st Quarter		16 Units
C112	Introduction to Information Technology	4
D104	Introduction to Software Applications	3
E010	Essential Language Skills	3
K103	Introduction to Electronics	3
M011	Algebra Essentials	3
2nd Quarter		17 Units
D222	PC Troubleshooting and Configuration	6
E113	Technical Composition	5
K105	Electronics Principles	6
3rd Quarter		18 Units
G201	Psychology	5
K115	Electronics Circuit Analysis	8
M111	Algebra	5
4th Quarter		18 Units
C225	Introduction to Programming	4
G102	Applied Physics	5
G211	Graduation Project, Planning Phase*	1
K201	Solid State Systems	8
5th Quarter		17 Units
E201	Perspectives of Language and Culture	5
K215	Digital Logic and Control Systems	12
6th Quarter		17 Units
D246	Networking	6
E231	Writing for the Technical Professions	4
G212	Graduation Project, Completion Phase*	1
K255	Modern Data Communications	6

*Required for degree program only.

HOSPITALITY AND TOURISM (Offered only at the Honolulu campus)

Course List

		Diploma	Associate in Applied Science Degree
Major Courses		27 Units	43 Units
G254	Conversational Japanese I	5	5
G255	Conversational Japanese II	5	5
T101	Hospitality and Tourism Overview	5	5
T102	Travel Procedures	6	6
T103	Hotel Operations	6	6
T104	Food Service		6
T105	Special Topics in Hospitality and Tourism		3
T107	Hospitality and Tourism Field Experience		3
T210	Hospitality and Tourism Internship or Substitution		4
Business Courses		37 Units	44 Units
B209	International Business		4
C112	Introduction to Information Technology	4	4
D104	Introduction to Software Applications	3	3
D121	Spreadsheet Applications	3	3
D221	Database Management		3
E010	Essential Language Skills	3	3
E020	Dynamic Communications	3	3
E225	Business Writing	4	4
G050	Integrated Learning	3	3
M010	Essential Math	3	3
M101	Math Principles	5	5
S101	Keyboarding	3	3
W101	Word Processing Essentials	3	3
General Education Courses		10 Units	27 Units
E110	Business College Composition	5	5
E201	Perspectives of Language and Culture		5
G201	Psychology	5	5
G204	Environmental Science		5
M201	Applied Mathematics		7
Total Required for Diploma/Degree		74 Units	114 Units
Keyboarding requirement: 40 wpm (words per minute)			
Recommended Substitutions for Diploma/Degree:			
A105	Accounting Fundamentals with Computer Applications		7
D202	Graphics and Presentations Seminar		3
D220	Principles and Technologies of E-Commerce		4
D222	PC Troubleshooting and Configuration		6
D225	Web Page Development		3

Recommended substitutions are for students who transfer courses from a regionally accredited institution or demonstrate proficiency for course credit.

Day & Evening Sample Programs

SAMPLE DAY PROGRAM

1st Quarter	16 Units
C112 Introduction to Information Technology	4
D104 Introduction to Software Applications	3
E010 Essential Language Skills	3
G050 Integrated Learning	3
S101 Keyboarding	3
P010 Workshop (if required)	0
2nd Quarter	15 Units
E020 Dynamic Communications	3
M010 Essential Math	3
T102 Travel Procedures	6
W101 Word Processing Essentials	3
P010 Workshop (if required)	0
3rd Quarter	22 Units
D121 Spreadsheet Applications	3
E225 Business Writing	4
G254 Conversational Japanese I	5
M101 Math Principles	5
T101 Hospitality and Tourism Overview	5
P010 Workshop (if required)	0
4th Quarter	21 Units
E110 Business College Composition	5
G201 Psychology	5
G255 Conversational Japanese II	5
T103 Hotel Operations	6
P010 Workshop (if required)	0
5th Quarter	21 Units
E201 Perspectives of Language and Culture	5
M201 Applied Mathematics	7
T104 Food Service	6
T105 Special Topics in Hospitality and Tourism	3
P010 Workshop (if required)	0
6th Quarter	19 Units
B209 International Business	4
D221 Database Management	3
G204 Environmental Science	5
T107 Hospitality and Tourism Field Experience	3
T210 Hospitality and Tourism Internship or Substitution	4
P010 Workshop (if required)	0

SAMPLE EVENING PROGRAM

1st Quarter	13 Units
C112 Introduction to Information Technology	4
D104 Introduction to Software Applications	3
E010 Essential Language Skills	3
G050 Integrated Learning	3
P010 Workshop (if required)	0
2nd Quarter	14 Units
E020 Dynamic Communications	3
M010 Essential Math	3
S101 Keyboarding	3
T101 Hospitality and Tourism Overview	5
P010 Workshop (if required)	0
3rd Quarter	15 Units
D121 Spreadsheet Applications	3
E225 Business Writing	4
M101 Math Principles	5
W101 Word Processing Essentials	3
P010 Workshop (if required)	0
4th Quarter	16 Units
E110 Business College Composition	5
G254 Conversational Japanese I	5
T102 Travel Procedures	6
P010 Workshop (if required)	0
5th Quarter	16 Units
G201 Psychology	5
G255 Conversational Japanese II	5
T103 Hotel Operations	6
P010 Workshop (if required)	0
6th Quarter	14 Units
E201 Perspectives of Language and Culture	5
T104 Food Service	6
T105 Special Topics in Hospitality and Tourism	3
P010 Workshop (if required)	0
7th Quarter	13 Units
D221 Database Management	3
M201 Applied Mathematics	7
T107 Hospitality and Tourism Field Experience	3
P010 Workshop (if required)	0
8th Quarter	13 Units
B209 International Business	4
G204 Environmental Science	5
T210 Hospitality and Tourism Internship or Substitution	4
P010 Workshop (if required)	0

Course List

**Associate in Applied
Science Degree**

45 Units

Major Courses

H101	Medical Office Procedures	6
H201	Medical Billing and Coding	6
H202	Computerized Medical Office	4
H203	Medical Transcription	4
H204	Laboratory Procedures and Pharmacology	6
H205	Clinical Procedures	4
H216	Medical Terminology	4
H225	Pharmacology and Drug Calculations	4
H250	Medical Assisting Externship	6
H251	Medical Assisting Seminar/Project	1

37 Units

Business Courses

C112	Introduction to Information Technology	4
D104	Introduction to Software Applications	3
D121	Spreadsheet Applications	3
E010	Essential Language Skills	3
E020	Dynamic Communications	3
E225	Business Writing	4
G050	Integrated Learning	3
M010	Essential Math	3
M101	Math Principles	5
S101	Keyboarding	3
W101	Word Processing Essentials	3

27 Units

General Education Courses

E110	Business College Composition	5
E201	Perspectives of Language and Culture	5
G201	Psychology	5
G214	Anatomy	5
M201	Applied Mathematics	7

Total Required for Degree

109 Units

Keyboarding requirement: 50 wpm (words per minute)

Recommended Substitutions for Degree:

A105	Accounting Fundamentals with Computer Applications	7
B103	Business Law	4

Recommended substitutions are for students who transfer courses from a regionally accredited institution or demonstrate proficiency for course credit.

Day & Evening Sample Programs

SAMPLE DAY PROGRAM

1st Quarter		16 Units
C112	Introduction to Information Technology	4
D104	Introduction to Software Applications	3
E010	Essential Language Skills	3
G050	Integrated Learning	3
S101	Keyboarding	3
P010	Workshop (if required)	0
2nd Quarter		15 Units
E020	Dynamic Communications	3
H101	Medical Office Procedures	6
M010	Essential Math	3
W101	Word Processing Essentials	3
P010	Workshop (if required)	0
3rd Quarter		21 Units
D121	Spreadsheet Applications	3
E225	Business Writing	4
G214	Anatomy	5
H216	Medical Terminology	4
M101	Math Principles	5
P010	Workshop (if required)	0
4th Quarter		23 Units
E110	Business College Composition	5
H201	Medical Billing and Coding	6
H202	Computerized Medical Office	4
H203	Medical Transcription	4
H225	Pharmacology and Drug Calculations	4
P010	Workshop (if required)	0
5th Quarter		17 Units
H204	Laboratory Procedures and Pharmacology	6
H205	Clinical Procedures	4
M201	Applied Mathematics	7
P010	Workshop (if required)	0
6th Quarter		17 Units
E201	Perspectives of Language and Culture	5
G201	Psychology	5
H250	Medical Assisting Externship	6
H251	Medical Assisting Seminar / Project	1
P010	Workshop (if required)	0

SAMPLE EVENING PROGRAM

1st Quarter		13 Units
C112	Introduction to Information Technology	4
D104	Introduction to Software Applications	3
G050	Integrated Learning	3
S101	Keyboarding	3
P010	Workshop (if required)	0
2nd Quarter		12 Units
E010	Essential Language Skills	3
H101	Medical Office Procedures	6
W101	Word Processing Essentials	3
P010	Workshop (if required)	0
3rd Quarter		15 Units
E020	Dynamic Communications	3
G214	Anatomy	5
H216	Medical Terminology	4
M010	Essential Math	3
P010	Workshop (if required)	0
4th Quarter		14 Units
D121	Spreadsheet Applications	3
H201	Medical Billing and Coding	6
M101	Math Principles	5
P010	Workshop (if required)	0
5th Quarter		15 Units
E225	Business Writing	4
H202	Computerized Medical Office	4
M201	Applied Mathematics	7
P010	Workshop (if required)	0
6th Quarter		18 Units
E110	Business College Composition	5
G201	Psychology	5
H203	Medical Transcription	4
H225	Pharmacology and Drug Calculation	4
P010	Workshop (if required)	0
7th Quarter		15 Units
E201	Perspectives of Language and Culture	5
H204	Laboratory Procedures and Pharmacology	6
H205	Clinical Procedures	4
P010	Workshop (if required)	0
8th Quarter		7 Units
H250	Medical Assisting Externship	6
H251	Medical Assisting Seminar / Project	1
P010	Workshop (if required)	0

MEDICAL OFFICE ADMINISTRATION

Course List

		Diploma	Associate in Applied Science Degree
Major Courses		16 Units	28 Units
H101	Medical Office Procedures	6	6
H201	Medical Billing and Coding	6	6
H202	Computerized Medical Office		4
H203	Medical Transcription		4
H210	Medical Internship or Substitution		4
H216	Medical Terminology	4	4
Business Courses		44 Units	54 Units
B101	Business Organization and Management	4	4
B206	Human Resources Management		4
C112	Introduction to Information Technology	4	4
D104	Introduction to Software Applications	3	3
D121	Spreadsheet Applications	3	3
D202	Graphics and Presentations Seminar		3
D221	Database Management		3
E010	Essential Language Skills	3	3
E020	Dynamic Communications	3	3
E225	Business Writing	4	4
G050	Integrated Learning	3	3
M010	Essential Math	3	3
M101	Math Principles	5	5
S101	Keyboarding	3	3
W102	Word Processing	6	6
General Education Courses		10 Units	27 Units
E110	Business College Composition	5	5
E201	Perspectives of Language and Culture		5
G201	Psychology		5
G214	Anatomy	5	5
M201	Applied Mathematics		7
Total Required for Diploma/Degree		70 Units	109 Units
Keyboarding requirement: 50 wpm (words per minute)			
Recommended Substitutions for Diploma/Degree:			
A105	Accounting Fundamentals with Computer Applications		7
B103	Business Law		4
D220	Principles and Technologies of E-Commerce		4
D222	PC Troubleshooting and Configuration		6
D225	Web Page Development		3
H225	Pharmacology and Drug Calculations*		4

*Honolulu campus only

Recommended substitutions are for students who transfer courses from a regionally accredited institution or demonstrate proficiency for course credit.

Day & Evening Sample Programs

SAMPLE DAY PROGRAM

1st Quarter	16 Units
C112 Introduction to Information Technology	4
D104 Introduction to Software Applications	3
E010 Essential Language Skills	3
G050 Integrated Learning	3
S101 Keyboarding	3
P010 Workshop (if required)	0
2nd Quarter	15 Units
E020 Dynamic Communications	3
H101 Medical Office Procedures	6
W102 Word Processing	6
P010 Workshop (if required)	0
3rd Quarter	20 Units
B101 Business Organization and Management	4
E225 Business Writing	4
G214 Anatomy	5
H216 Medical Terminology	4
M010 Essential Math	3
P010 Workshop (if required)	0
4th Quarter	19 Units
D121 Spreadsheet Applications	3
E110 Business College Composition	5
H201 Medical Billing and Coding	6
M101 Math Principles	5
P010 Workshop (if required)	0
5th Quarter	20 Units
B206 Human Resources Management	4
E201 Perspectives of Language and Culture	5
H202 Computerized Medical Office	4
M201 Applied Mathematics	7
P010 Workshop (if required)	0
6th Quarter	19 Units
D202 Graphics and Presentations Seminar	3
D221 Database Management	3
G201 Psychology	5
H203 Medical Transcription	4
H210 Medical Internship or Substitution	4
P010 Workshop (if required)	0

SAMPLE EVENING PROGRAM

1st Quarter	13 Units
C112 Introduction to Information Technology	4
D104 Introduction to Software Applications	3
G050 Integrated Learning	3
S101 Keyboarding	3
P010 Workshop (if required)	0
2nd Quarter	12 Units
E010 Essential Language Skills	3
M010 Essential Math	3
W102 Word Processing	6
P010 Workshop (if required)	0
3rd Quarter	14 Units
E020 Dynamic Communications	3
H101 Medical Office Procedures	6
M101 Math Principles	5
P010 Workshop (if required)	0
4th Quarter	16 Units
D121 Spreadsheet Applications	3
E225 Business Writing	4
G214 Anatomy	5
H216 Medical Terminology	4
P010 Workshop (if required)	0
5th Quarter	15 Units
B101 Business Organization and Management	4
E110 Business College Composition	5
H201 Medical Billing and Coding	6
P010 Workshop (if required)	0
6th Quarter	14 Units
B206 Human Resources Management	4
D202 Graphics and Presentations Seminar	3
M201 Applied Mathematics	7
P010 Workshop (if required)	0
7th Quarter	16 Units
D221 Database Management	3
E201 Perspectives of Language and Culture	5
H202 Computerized Medical Office	4
H203 Medical Transcription	4
P010 Workshop (if required)	0
8th Quarter	9 Units
G201 Psychology	5
H210 Medical Internship or Substitution	4
P010 Workshop (if required)	0

NETWORKING TECHNOLOGY

Course Information

The Associate in Applied Science Degree in Networking Technology

Graduates of the following Heald College Associate in Applied Science degree programs may earn a second A.A.S. degree by completing the 32-unit, three-quarter Networking Technology program curriculum for Microsoft® Windows® 2000 or the 20-unit, two-quarter Networking Technology program curriculum for Cisco Systems.

Business Software Applications	106 Units
Computer Technology	105 Units
Electronics Technology	103 Units

A.A.S. degree graduates from other Heald College programs (103 to 111 units) may earn a second A.A.S. degree in Networking Technology by first completing the following courses and then completing the Networking Technology program of their choice.

D222 PC Troubleshooting and Configuration	6 Units
D246 Networking	6 Units

Certification Exams

To become a Microsoft Certified Systems Engineer (MCSE) or a Cisco Certified Network Associate (CCNA), the student must pass a series of certification exams at an authorized testing center.

Heald Certificates of Completion

Students who have equivalent training or experience in the computer/electronics field, but who have not earned a Heald Associate in Applied Science degree, may earn certificates of completion by completing the three-quarter Networking Technology program curriculum for Microsoft® Windows® 2000 or the two-quarter Networking Technology program curriculum for Cisco Systems.

Day & Evening Sample Programs

Networking Technology, Microsoft® Windows® 2000

Quarter 1 11 Units

N725	Network and Operating Essentials	3
N735	Windows 2000 Implementation	5
N745	Network Infrastructure Implementation	3

Quarter 2 11 Units

N746	Network Infrastructure Support	2
N825	Directory Services Implementation and Administration	5
N836	Network Services Design	4

Quarter 3 10 Units

N925	Directory Services Design	3
N935	Network Security	5
N945	Network Upgrade Strategies	2

Heald Certificate of Completion, Networking Technology 32 Units

Or

Associate in Applied Science Degree In Networking Technology 135 to 155 Units*

With an emphasis in Microsoft® Windows® 2000.

*The A.A.S. NT is available only as a second Heald A.A.S. degree. The total number of units required depends on those required for the first A.A.S. degree.

The three-quarter certificate program with emphasis on Microsoft® Windows® 2000 is designed for network professionals. Students learn to effectively plan, implement, maintain, and support information systems with Microsoft® Windows® 2000. To become a Microsoft Certified Systems Engineer, the student must pass a series of certification exams at a Microsoft authorized testing center.

Microsoft®
IT Academy Program

Networking Technology, Cisco Systems

Quarter 1 10 Units

Q700	Network Essentials and Cisco Networking Fundamentals	6
Q750	Routing Technologies	4

Quarter 2 10 Units

Q800	Advanced Routing and Switching	4
Q850	WAN Technologies and Project-Based Learning	6

Heald Certificate of Completion, Networking Technology 20 Units

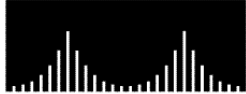
Or

Associate in Applied Science Degree in Networking Technology 123 to 143 Units*

With an emphasis in Cisco Systems.

*The A.A.S. NT is available only as a second Heald A.A.S. degree. The total number of units required depends on those required for the first A.A.S. degree.

The two-quarter certificate program provides students with the foundation knowledge necessary to become Cisco Certified Network Associates (CCNAs). By participating in Networking Technology, Cisco program students will learn the basic knowledge and skills necessary for network design, installation, and maintenance. To become a Cisco Certified Network Associate, students must pass a certification exam at a Cisco authorized testing center.

CISCO SYSTEMS

**NETWORKING
ACADEMY**

WEB DESIGN AND ADMINISTRATION

Course Information

The Associate in Applied Science Degree in Web Design and Administration*

Graduates of the Heald College Associate in Applied Science degree programs in Computer Technology or Business Software Applications may earn a second A.A.S. degree in Web Design and Administration by completing the 36-unit, three-quarter Web Design and Administration program.

Graduates of the Heald College Associate in Applied Science degree programs in Computer Business Administration or Electronics Technology may also earn a second A.A.S. degree in Web Design and Administration by first completing the following courses and then by successfully completing the three-quarter Web Design and Administration program:

D222 PC Troubleshooting **6 Units**

C245 Internet Studies **6 Units**

D246 Networking **6 Units**

Or

C241 Data Communications and Networking Technology **12 Units**

Course Grading Policies

Each course in the Heald College Web Design and Administration program is considered to be a major course. Heald policy states that a student must receive a grade of "C" or higher in each major course in order to be awarded a degree or certificate of completion.

Certification Exams

Students must pass a series of six certification exams in order to obtain the Certified Internet Webmaster Professional, Associate, Master Designer, and Master Administrator certifications. These exams may be taken at designated Heald College campuses or at off-site authorized training center locations.

Heald Certificate of Completion

Students who have equivalent training or experience in the field, but who have not earned a Heald Associate in Applied Science degree, may earn a certificate of completion by completing the three-quarter Web Design and Administration program.

Day & Evening Sample Program

Quarter 1 12 Units

I725	Network and Internet Fundamentals	4
I735	Web Page Authoring Fundamentals	4
I745	TCP/IP Concepts and Practices	4

Quarter 2 12 Units

I825	Web Design Methodology and Technology	4
I835	E-Commerce Strategies	4
I845	E-Commerce Practices	4

Quarter 3 12 Units

I925	Internet System Management	4
I935	Network and Operating System Security and Firewalls	4
I945	Security Auditing, Attacks and Threat Analysis	4

Heald Certificate of Completion 36 Units Web Design and Administration

Or

Associate in Applied Science Degree 141 to 161 Units* In Web Design and Administration

*The A.A.S. in Web Design and Administration is only available as a second Heald A.A.S. degree or equivalent. The total number of units depends on those required for the first A.A.S. degree.

The Web Design and Administration program is available beginning July 2002.



Course Descriptions

A105 Accounting Fundamentals with Computer Applications 7 Units

Introduction to and application of fundamental accounting terms, concepts, principles, and procedures through the study of the accounting cycle for a service business. Topics covered include accounting for cash, payroll, combined journal, sales and purchases, and financial statement preparation. Students journalize transactions and prepare reports in a computerized environment, utilizing a popular commercial software package. Through the integration of theory and computer practice, students prepare to enter the business environment.

A201 Accounting Principles I 7 Units

Analytical study and application of accounting concepts, principles, and procedures as they apply to proprietorships, partnerships, and corporations. Emphasis is placed on accounting for merchandising, including accruals, assets, liabilities, and financial statement preparation.

Prerequisite:

A105 Accounting Fundamentals with Computer Applications

A202 Accounting Principles II 7 Units

Detailed examination of accounting concepts, principles, and procedures applicable to business organizations with special emphasis on partnerships and corporations. This course explores stock and bond transactions, consolidation, reporting income and retained earnings, earnings per share, installment notes payable, and preparation and analysis of financial statements.

Prerequisite:

A201 Accounting Principles I

A203 Income Tax Accounting 7 Units

Detailed examination and application of accounting concepts and skills required to prepare federal and state income tax returns. Concepts explored include deductions, filing status, miscellaneous income, exclusions, adjustments, credits, capital assets, installment sales, and business expenses.

Prerequisite:

A201 Accounting Principles I

A204 Managerial Accounting 4 Units

Application of accounting principles for manufacturing activities, including analysis of cost behavior and procedures used to determine the costs of the products that a company manufactures and sells. This course focuses on identifying, measuring, preparing, and communicating financial information used in management decisions, planning, and control.

Prerequisite:

A202 Accounting Principles II

A210 Accounting Internship 4 Units

The internship program is an opportunity for students to gain the experience necessary to compete in today's job market. It is designed to provide students with real-life work experiences in on-the-job training situations relevant to their major fields of study. Internships provide students the opportunities to put theory into practice, applying the knowledge and skills they have learned at Heald to actual work situations. Taken in the final quarter of the degree program.

B101 Business Organization and Management 4 Units

As an introduction to the management process, this course explores the theory and application of management concepts and organizational and financial structures in all enterprises including e-business. Case analysis and problem-solving techniques are used to examine the planning and organization of work flow, delegation, leadership styles, decision making, stress and time management, and employee relations. Discussion and group activities support the student in developing a personal management philosophy and an understanding of the functions of managers.

B103 Business Law 4 Units

Students are introduced to the laws applicable to business institutions and their operations with discussion on applications of the law to e-business. Topics covered include the American legal system as an instrument of economic, social and political control, contracts and sales, organizational structure, ethics, and the regulatory process. The course presents a basic overview of the concepts and terminology essential to understanding the field of business law.

B205 Economics 4 Units

Introduction to the general principles, terminology, and methods of economics, with emphasis on macroeconomics. Topics include market systems and economic cycles, including recession, unemployment and inflation, national income accounts, macroeconomic equilibrium, money and financial institutions, monetary and fiscal policy, and international trade and finance. Discussion and group activities incorporate the use of problem sets and case studies.

Prerequisite:

M010 Essential Math

B206 Human Resources Management 4 Units

Overview of contemporary and historical human resources management techniques and principles in all enterprises, including e-business. Through discussion, case analysis, and team problem solving, students explore procedures and responsibilities in hiring, including the increasing importance of the Internet in recruiting. Supervision, employee development and career management, resource allocation, telecommuting issues, labor relations, health and safety issues, equal employment opportunities, and employment law are explored.

B209 International Business 4 Units

The varied dimensions of doing business in an international context are examined, emphasizing patterns of international trade, social and political frameworks, the economic environment, and national and international constraints. Other topics addressed are general management issues associated with planning, finance, marketing, staffing, legal requirements, and the impact of e-business on the global economy.

B215 Integrated Office Environments 6 Units

Students develop the organizational and practical skills essential to the business office, including managing time, monitoring projects, organizing teams, planning events, anticipating needs, supervising staff, setting up office management systems, and conducting Internet research. The course also includes instruction in the use of integrated office software for the preparation of professional documents, as well as the use of timesaving technologies for project management and electronic communications.

Prerequisites:

D121 Spreadsheet Applications

D202 Graphics and Presentations Seminar

D221 Database Management

W101 Word Processing Essentials or W102 Word Processing

C112 Introduction to Information Technology 4 Units

Students will be introduced to information technologies (IT) including such topics as historical and current use of the Internet, an overview of hardware and software categories, communication technologies, and other information systems. Students will learn about the structure of the Internet and the transmission of data, as well as security and reliability issues related to the Internet. Students will examine how computers and technology are used in an office environment and what the future of IT holds.

C120 Customer and IT Support 3 Units

Students will acquire the skills to provide basic technical support in an organizational environment, including keyboarding, customer service, and project management skills. Additionally, major help desk concepts such as trouble tickets, maintenance documentation, and incident management will be introduced and then applied to real-world situations.

C132 Visual BASIC Programming I 4 Units

This course introduces event-driven computer programming using the Visual BASIC programming language. Topics include input/output operations, sequence, selection, arithmetic operations, forms, sequential files, and other related topics. This course introduces on-screen components such as command buttons and list boxes.

Prerequisite:

D104 Introduction to Software Applications

C135 Operating Systems Support 6 Units

This course provides the advanced skills and information required for technical support personnel to install, configure, support, and troubleshoot DOS and Microsoft Windows operating systems in both a standalone and network environment. Skills practiced include efficient installation methods, software configuration, troubleshooting techniques, and interfacing with customers.

Prerequisite:

D222 PC Troubleshooting and Configuration

C210 Applications for Computer Technicians 3 Units

Students will acquire skills necessary to troubleshoot office applications. Topics include advanced features of common application programs, as well as methods of exchanging data across applications such as Microsoft Word, Excel, and PowerPoint. Troubleshooting hardware and software specifications will also be addressed.

Prerequisites:

D104 Introduction to Software Applications

D221 Database Management

C222 Microcomputer Systems 8 Units

Provides in-depth coverage of the knowledge and skills needed to identify, install, configure, and upgrade microcomputer systems and components, as well as procedures for diagnosing and troubleshooting common PC problems and system malfunctions. Includes installing, configuring, and troubleshooting printers, keyboards, video displays, disk devices, sound systems, CD-ROMs, and modems. Interface "standards" such as RS-232, Centronics parallel, and USB are also discussed. Networking basics are introduced, including peer-to-peer and client/server environments.

Prerequisite:

C135 Operating Systems Support

C225 Introduction to Programming 4 Units

This course introduces students to structured programming languages commonly used within industry. Topics include operators, expressions, program flow, port and file input/output, simple arrays, and functions. Lab experiments include writing programs for electronics applications.

Course Descriptions

C235 Transmission Media and Networking 6 Units

Basics of networking topologies and data communications with an emphasis on the hardware components of a local area network (LAN). Beginning with serial connections, students explore modems and RS-232 and work their way up to high-speed digital circuits, fiber optics, and ISDN. The course takes a systems approach to the development and design of computer networking and systems administration. Basic theory, planning, required analysis, and design alternatives are presented. Upon completion, students understand the issues involved in planning, designing, installing, and managing a local area network.

Prerequisite:

C222 Microcomputer Systems

C240 Data Communications and Networking 8 Units

Introduction to electronic communications technology with special emphasis on data communications systems and local area networks (LANs). Laboratory exercises provide practical experience with communications technology systems. Emphasis on systems operations, testing, circuit troubleshooting, modem communications, and LANs.

Prerequisite:

C235 Transmission Media and Networking

D104 Introduction to Software Applications 3 Units

Students will acquire introductory skills in major software applications used in professional environments: word processing, spreadsheets, presentation, database, and e-mail software. Additionally, data storage and file management will be addressed.

D121 Spreadsheet Applications 3 Units

Provides coverage of the operations and features of spreadsheet software. Students analyze and apply spreadsheet solutions to business problems in the areas of finance, information tracking, reporting, and presentation. Real-world business situations are explored through the use of creative thinking and problem-solving techniques.

Prerequisite:

D104 Introduction to Software Applications

D202 Graphics and Presentations Seminar 3 Units

Using current desktop publishing software and electronic presentation tools, students develop skills to create effective multimedia presentations and desktop publications. Applications include using fonts, styles, layouts, graphics, online resources, and video and sound clips. Audience analysis, planning, and citation are addressed, as well as the preparation and practice of oral presentations.

Prerequisite:

W101 Word Processing Essentials or W102 Word Processing

D210 Business Internship 4 Units

The internship program is an opportunity for students to gain the experience necessary to compete in today's job market. It is designed to provide students with real-life work experiences in on-the-job training situations relevant to their major fields of study. Internships provide students the opportunities to put theory into practice, applying the knowledge and skills they have learned at Heald to actual work situations. Taken in the final quarter of the degree program.

D220 Principles and Technologies of E-Commerce 4 Units

Students will gain an understanding of how business is conducted over the Internet. Topics include an industry overview, major industry players, and job families prevalent in the e-commerce world. Students will work in teams to create and present a proposal for an Internet-based business, exploring such issues as security, online transactions and payments, marketing, and sales. They will compare and contrast the technologies and strategies used in e-commerce.

Prerequisite:

C112 Introduction to Information Technology

D221 Database Management 3 Units

The course is an introduction to the use of a database management program, including database structure, accessing, editing, and searching files, and designing and producing reports and labels.

Prerequisite:

D104 Introduction to Software Applications

D222 PC Troubleshooting and Configuration 6 Units

Students will begin by studying DOS and progress to applying the elements of PC troubleshooting and configuration. Students study hardware installation and configuration, as well as troubleshooting computer hardware failures, adding peripherals, resolving compatibility issues, and maintaining effective customer relations.

Prerequisite:

C112 Introduction to Information Technology

D225 Web Page Development 3 Units

Students will be introduced to the basics of HTML programming. They will learn how to develop simple web pages, post and list their website with various search engines, and edit HTML code using editing software. Students will also analyze performance and usability issues, as well as issues affecting cost such as server space and website traffic. They will plan a website using a team development approach and project management skills.

Prerequisites:

C112 Introduction to Information Technology
D220 Principles and Technologies of E-Commerce

D246 Networking 6 Units

Students focus on networking technology with special emphasis on how computers communicate through a network. Topologies, local area networks (LANs), and wide area networks (WANs) are studied. Emphasis is placed on system operations and testing, modem communications, and LANs. Network operating systems are introduced.

Prerequisite:

D222 PC Troubleshooting and Configuration

E010 Essential Language Skills 3 Units

An integrated approach to the mechanics of communication, emphasizing the practical application of reading, writing, listening, and speaking in a professional environment. Instruction in the parts of speech, sentence structure, and verb-tense agreement strengthens the student's written and oral communication skills.

E020 Dynamic Communications 3 Units

Incorporates all aspects of communication in helping students develop clear and concise written and oral language skills. Selected readings are studied as models for writing, with emphasis on an organized approach to writing and editing. Team projects, presentations, and peer critiques focus on current business themes and cultural issues. Students compile written work to create a business magazine as a final project.

Prerequisite:

E010 Essential Language Skills

E110 Business College Composition 5 Units

Research and editing techniques, persuasive writing, audience analysis, language sensitivity, and problem-solving communication skills developed through group discussion, panel debates, selected readings, and written and oral presentations. Special emphasis is placed on analysis of readings, team feedback and cooperation, development of written research papers, and effective oral presentations. Students write a minimum of 5,000 words in a number of essays and complete a final research project on a topic relevant to business and industry.

Prerequisite:

E020 Dynamic Communications

E113 Technical Composition 5 Units

Students learn research and writing techniques, persuasive writing, audience analysis, language sensitivity, and essay formats which are developed through group discussion, selected readings, and written and oral presentations. Topics focus on emerging issues in the technical professions.

Prerequisite:

E010 Essential Language Skills

E201 Perspectives of Language and Culture 5 Units

A study of selected readings and presentations of fiction, essays, and novels by important contemporary writers, with emphasis on controversial moral, social, and cultural issues. Students take a humanities approach in the exploration of culture and its origins, values, and changing status. Discussion, response papers, group projects, panel debates, team and individual presentations, and peer critiques assist students in developing the skills to present sensitive and controversial topics to an audience. Students write a minimum of 5,000 words in essays, reports, and a final research project relating contemporary language and cultural issues to current business and industry trends.

Prerequisite:

E110 Business College Composition or E113 Technical Composition

E225 Business Writing 4 Units

Students focus on oral and written communication skills essential to the workplace. Specific communication strategies are utilized, including interviewing, negotiations, and e-mail etiquette. Topics include employment benefits, work ethics, business documents, and customer service. Students explore career and industry opportunities.

Prerequisite:

E020 Dynamic Communications

E231 Writing for the Technical Professions 4 Units

Students explore the oral and written communication skills essential to a technical work environment. Documentation of technical practices and procedures is addressed, simulating the writing demands of the technical professions. Specific communication strategies are utilized, including interviewing, negotiations, and e-mail etiquette. Topics include employment benefits, work ethics, business documents, and customer service. Students explore career and industry opportunities.

Prerequisites:

C120 Customer and IT Support
E113 Technical Composition

Course Descriptions

G050 Integrated Learning 3 Units

Students will focus on the development of life-long learning skills by exploring critical thinking, teamwork, and problem solving in a workplace environment. Students will develop workplace skills, communication skills, and knowledge of organizational environments. Students begin to assemble their professional portfolio which demonstrates their academic and personal accomplishments.

G102 Applied Physics 5 Units

Study of physics concepts as applied to industry/technical fields. Topics include the principles of magnetism and electricity, kinetic theory, work and energy, wave motion and sound, light and optics, and thermodynamics.

Prerequisite:

M111 Algebra or M113 Algebra for Computer Technicians

G201 Psychology 5 Units

An introduction to basic theories and concepts in the science of behavior, perception, motivation, and personality, including the application of basic psychology to personal development, human relations, and behavior. Topics include biological and cognitive processes, life-span development, behavioral disorders, and applied psychology. This course emphasizes the application of behavioral science concepts in a business or technical environment.

Prerequisite:

E020 Dynamic Communications or E113 Technical Composition

G204 Environmental Science 5 Units

Study of contemporary environmental issues, emphasizing a multi-disciplinary approach. Topics covered include energy, nutrition, pollution, and impacts of population. Students explore the scientific, political, economic, and social implications of environmental science to develop an understanding of environmental issues and concerns.

Prerequisite:

E020 Dynamic Communications

G211 Graduation Project, Planning Phase 1 Unit

Selection and planning of the final graduation project. Students begin the process of identifying and selecting topics for their final graduation projects, develop preliminary plans and timelines, and petition for approval by the assigned project advisor.

G212 Graduation Project, Completion Phase 1 Unit

Development and completion of the graduation project approved by the project advisor. The completed final project emphasizes demonstration of technical knowledge, research and analytic processes, time and project management, and creativity. Written and oral presentation of the graduation project takes place in E230 Technical Writing.

Prerequisite:

G211 Graduation Project, Planning Phase

G214 Anatomy 5 Units

A survey of the structure and function of the human organ systems, designed to provide a basic understanding of the human body and associated terminology.

G254 Conversational Japanese I 5 Units

An introduction to the language, culture, and customs of Japan, this course emphasizes the student's ability to listen and comprehend. Through discussion and class activities, students learn to formulate and give basic responses in the Japanese language. Conversational use of basic sentence patterns and commonly used expressions supports development of a basic Japanese vocabulary.

G255 Conversational Japanese II 5 Units

This course continues the study of the language, culture, and customs of Japan, with emphasis on increasing the student's ability to converse in the Japanese language. Students develop expanded vocabularies of Japanese words and commonly used expressions as they participate in more involved conversational activities. Application using increasingly complex sentence structure assists students in developing confidence in their ability to communicate in the Japanese language.

Prerequisite:

G254 Conversational Japanese I

H101 Medical Office Procedures 6 Units

Development of business administration skills important to the effective management of a medical office. Procedures and topics examined include pegboard accounting, ethics, appointment scheduling, medical records, and patient interactions. Focus is on development of the organizational skills utilized by the medical receptionist.

H201 Medical Billing and Coding 6 Units

Fundamentals of medical insurance billing, including billing and collection procedures, insurance claim filing, procedural and diagnostic coding, and collection law. Emphasis is placed on accuracy in completing forms for major health plans. Students use standard procedural and diagnostic coding references.

Prerequisites:

G214 Anatomy

H101 Medical Office Procedures

H216 Medical Terminology

H202 Computerized Medical Office 4 Units

Hands-on practice with specialized medical software. Students develop skill in entering, editing, analyzing, and retrieving data regarding patients, insurance billing, coding of diseases, medical records, and related medical information.

Prerequisites:

G214 Anatomy

H101 Medical Office Procedures

H216 Medical Terminology

H203 Medical Transcription 4 Units

Training in the transcription of recorded dictation with emphasis on documents and terminology prevalent in the medical field. Students use transcription machines with word processing software to transcribe medical documents and reports, applying the principles of English grammar, punctuation, spelling, and keyboarding improvement, as well as the knowledge of medical terminology, to their work.

Prerequisites:

H216 Medical Terminology

S101 Keyboarding

W101 Word Processing Essentials or W102 Word Processing

H204 Laboratory Procedures and Pharmacology 6 Units

A general introduction to laboratory techniques, including the collection of routine specimens, the preparation and examination of samples for diagnostic purposes, and the recognition of normal laboratory values and abnormal limits. Students develop skills in injection, venipuncture, and other methods of blood collection. The areas of urology and endocrinology are studied, including the structure and function of the lymphatic, renal, and reproductive systems. Electrocardiograms are introduced, and students learn to recognize serious deviations on the ECG. Students are trained to recognize emergency situations and supply lifesaving measures through the study of CPR (cardiopulmonary resuscitation). This course includes the study and identification of commonly administered drug groups, their uses, and their effects on the body. Abbreviations and terminology relating to pharmaceuticals are studied, as well as ethical standards for administering and dispensing drugs.

Prerequisites:

H201 Medical Billing and Coding

H202 Computerized Medical Office

H205 Clinical Procedures 4 Units

This course covers basic clinical care skills and procedures necessary to perform routine patient care in a clinic or office situation.

Recognition of basic office routines and diagnostic procedures, including vital signs, patient preparation and positioning, aseptic technique and the fundamentals of microbial control are emphasized. Students are trained to recognize and respond to emergency situations through the study of the principles of first aid.

Prerequisites:

H201 Medical Billing and Coding

H202 Computerized Medical Office

H210 Medical Internship 4 Units

The internship program is an opportunity for students to gain the experience necessary to compete in today's job market. It is designed to provide students with real-life work experiences in on-the-job training situations relevant to their major fields of study. Internships provide students the opportunities to put theory into practice, applying the knowledge and skills they have learned at Heald to actual work situations. Taken in the final quarter of the degree program.

H216 Medical Terminology 4 Units

A study of medical terminology, concentrating on prefixes, suffixes, and roots common to diseases and to the medical field. Pronunciation, identification, and spelling are stressed.

H225 Pharmacology and Drug Calculations 4 Units

This course is designed to provide students with a basic knowledge of pharmacology and drug dosage calculation. The pharmacology portion of the course will incorporate such areas as drug classifications, action/kinetics, side effects, drug interactions, and desired outcomes. The dosage calculation portion of the course will emphasize the use of roman numerals, percents, ratios, metric conversions, apothecary, and household measurement systems.

Prerequisites:

G214 Anatomy

H216 Medical Terminology

M101 Math Principles

H250 Medical Assisting Externship 6 Units

Practical work experience with the opportunity to perform various clinical and administrative procedures in a supervised program for a minimum of 200 clock hours in a medical facility. Taken concurrently with a seminar/project course to correlate patient care principles and concepts with the hands-on experience of patient care situations as presented in the externship. Taken in the final quarter of the degree program.

Prerequisites:

H204 Laboratory Procedures and Pharmacology

H205 Clinical Procedures

Course Descriptions

H251 Medical Assisting Seminar/Project 1 Unit

Seminar classes are a vital part of the externship experience and are held in conjunction with the Medical Assisting Externship. This course offers an opportunity for students to discuss their experiences during externship and develop a final project. The completed final project, approved by the externship coordinator or the medical program coordinator, demonstrates the technical knowledge and research and analytic skills students have gained throughout the program. Students make written and oral presentations of the completed project. Taken in the final quarter of the degree program.

I725 Network and Internet Fundamentals 4 Units

Students will explore the Internet and its wide array of useful resources including how to use key Internet technologies such as web browsers, e-mail, newsgroups, File Transfer Protocol (FTP), Telnet, and search engines. Students will also use a variety of web-based search engines to conduct advanced searches and learn the basics of e-commerce and security issues. Additional topics include network architecture and standards, networking protocols, TCP/IP, Internet servers, server-side scripting and database connectivity, and security.

I735 Web Page Authoring Fundamentals 4 Units

Students will create and author web pages in this course using a text editor and a graphical user interface (GUI) editor. Students will also learn how to use Cascading Style Sheets (CSS) and study the basics of Extensible Hypertext Markup Language (XHTML), JavaScript, Dynamic HTML (DHTML), and the Document Object Model (DOM). After completing this course, students will be able to create simple web pages containing text, graphics, hyperlinks, tables, forms, and frames.

I745 TCP/IP Concepts and Practices 4 Units

Students will use Transmission Control Protocol/Internet Protocol (TCP/IP) concepts and protocols so they can effectively plan, deploy and manage a TCP/IP enterprise network. Students will also learn to build an enterprise network and analyze TCP/IP application and protocol information. In addition, students will become familiar with TCP/IP routing, network troubleshooting, network management, and next-generation Internet protocol technologies. Students will receive instruction on the concepts and protocols used in Internet routing, and learn how to troubleshoot TCP/IP networks using a packet sniffer and TCP/IP utilities. Students will configure the Simple Network Management Protocol (SNMP) and implement a functional Internet Protocol, version 6 (IPv6), network in the classroom.

I825 Web Design Methodology and Technology 4 Units

Students will create and manage websites with tools such as Macromedia Dreamweaver 4.0 and Flash 5.0, Microsoft FrontPage 2000, Dynamic HTML, and various multimedia and cascading style sheet standards. Students will also implement the latest strategies to develop third-generation websites, evaluate design tools, discuss future technology standards, and explore the incompatibility issues surrounding current browsers. Students will study and apply theory, design and web construction, along with information architecture concepts, web project management, scenario development, and web performance evaluations.

I835 E-Commerce Strategies 4 Units

Students will learn how to conduct business online and how to manage the technological issues associated with constructing an e-commerce website. Students will implement a genuine transaction-enabled business-to-consumer website, examine strategies and products available for building e-commerce sites, examine how such sites are managed, and explore how they can complement an existing business infrastructure.

I845 E-Commerce Practices 4 Units

Students will create an e-commerce site, online catalogs, and provide transaction security. Students will have hands-on experience implementing the technology to engage cardholders, merchants, issuers, payment gateways and other parties in electronic transactions. In addition, students will learn about website management and performance testing.

I925 Internet System Management 4 Units

Students will learn user management concepts in Windows 2000 and Linux, configure Domain Name System (DNS) services, and Microsoft WINS, Samba, Telnet, and FTP. Students will also learn how to choose appropriate Internet system platforms and how to configure Windows 2000 Server and Red Hat Linux to use TCP/IP. In addition, students will learn about backup and load balancing issues, and the basics of Internet security.

I935 Network and Operating System Security and Firewalls 4 Units

Students will learn to establish an effective security policy, identify different types of hacker activities, understand the hacker's mindset, and prevent and manage hacker attacks. Students will evaluate authentication procedures, encryption standards and implementations, ports and protocols that hackers manipulate, and how to engage in proactive detection and response/reporting methods. In addition, students will learn how to protect Windows 2000 and Linux systems from attacks, reconfigure the operating system to fully protect it, and scan hosts for known security problems. By the end of the course, students will have a practical understanding of the security architectures used by Windows 2000 and Linux.

I945 Security Auditing, Attacks, and Threat Analysis 4 Units

Students will perform different phases of a security audit, including discovery, and how to prevent unauthorized users from controlling company networks. The students will determine how to use Windows 2000 and Linux to identify security issues and suggest industry-standard solutions. Students will generate effective audit reports that can help organizations improve their security and become current with industry security standards.

K103 Introduction to Electronics 3 Units

Introduction to Electronics provides an overview of the electronics industry. Students study the electrical concepts of voltage, current, resistance, Ohm's Law, component and test equipment identification and use, resistor color code, schematic symbols, reading schematic diagrams, and an introduction to Electronic Workbench. Students also investigate career paths in the field of electronics technology, from the field service technician to the design engineer. Basic laboratory exercises include breadboarding and testing of simple DC resistive circuits.

K104 Computer Electronics 3 Units

Students will explore electronics fundamentals relative to the field of computer technology. Students will investigate basic logic gates and AC/DC electronics as applied to logic gates. Electronics Workbench is used to simulate the functionality of the logic circuits. Students will test, measure, and troubleshoot various logic circuits. Lab experiments include computer-aided circuit analysis and circuit test simulation, practice in component identification, breadboarding, and testing logic circuits.

Prerequisite:

K103 Introduction to Electronics

K105 Electronics Principles 6 Units

Students investigate DC electronics, including series, parallel, and series-parallel circuits. Basic AC concepts and logic gates are introduced. Electronics Workbench is used to simulate the functionality of electronics circuits and test measurement techniques. Lab experiments include computer-aided circuit analysis and circuit test simulation, practice in component identification, breadboarding, testing circuits, and soldering and desoldering techniques.

Prerequisite:

K103 Introduction to Electronics

K115 Electronics Circuit Analysis 8 Units

An in-depth investigation of AC circuits. Topics covered include inductors, relays, transformers, capacitors and time constants, reactance, resonance, diodes and power supplies, and an introduction to bipolar and field effect transistors. Lab experiments include computer simulation, breadboarding, testing, and troubleshooting a variety of AC circuits.

Prerequisite:

K105 Electronics Principles

K201 Solid State Systems 8 Units

This course introduces transistors and operational amplifiers in switching circuits, analog signal processing, filtering circuits, signal generation, and wave shaping applications. Additionally, this course investigates the use of these and other analog control and sensing devices in industrial electronics applications. Lab experiments include computer simulation, breadboarding, testing, and troubleshooting a variety of switching, amplifiers, and filtering circuits, and analog industrial control and sensing techniques.

Prerequisite:

K115 Electronics Circuit Analysis

K215 Digital Logic and Control Systems 12 Units

This course is an in-depth study of digital logic, from the discrete gates, counters, multiplexers, flip-flops, and registers through the more complex digital circuitry used in control systems, including microprocessor and interfacing techniques. The course also bridges the gap between analog and digital electronics with analog-to-digital (ADC) and digital-to-analog (DAC) converters, as well as digitally based control and sensing systems. Lab experiments include computer simulations, breadboarding, testing, and troubleshooting a variety of digital circuits, DAC and ADC applications, control and sensing systems, and interfacing techniques in industrial electronics applications.

Prerequisite:

K201 Solid State Systems

K255 Modern Data Communications 6 Units

Modern Data Communications provides an introduction to data communication, including AM/FM transmission, antennae theory and wave propagation, modulation and demodulation, phase-locked loop, serial communications, and noise distortion. Lab experiments include the production, testing, and debugging of local and distance communication systems.

Prerequisite:

K115 Electronics Circuit Analysis

M010 Essential Math 3 Units

A review of the fundamental operations of arithmetic, including whole numbers, fractions, ratios, proportions, and percents. A brief introduction to algebra, signed numbers, and statistics is included. Special emphasis is placed on the application of basic math skills to common business problems and real-life situations.

M011 Algebra Essentials 3 Units

Algebraic topics essential for success in technical careers. Topics covered include the decimal number system, fractions, percentages, exponents and radicals, algebraic expressions, and linear equations.

Course Descriptions

M101 Math Principles 5 Units

Algebra topics essential for success in other courses as well as in business are presented. Through real-world business examples and applications, students practice fundamental operations with number systems, formulas, and algebraic expressions. The course also explores problems involving factoring, inequalities, exponents, radicals, linear equations, functions, and graphs.

Prerequisite:

M010 Essential Math

M111 Algebra 5 Units

Concepts and techniques of intermediate algebra, including functions and operations with algebraic expressions, exponents, and radicals; simultaneous and quadratic equations; systems of equalities and inequalities; linear and nonlinear systems; logarithmic equations; ratios and proportions; and functions and graphs.

Prerequisite:

M011 Algebra Essentials

M113 Algebra for Computer Technicians 5 Units

Concepts and topics of intermediate algebra, including functions and operations with algebraic expressions, linear and nonlinear systems of equations, number systems, truth tables, and exposure to Boolean algebra.

Prerequisite:

M011 Algebra Essentials

M201 Applied Mathematics 7 Units

This course focuses on analyzing quantitative information to make decisions, judgments, and predictions. Students solve financial, mathematical, and statistical problems using word processing and spreadsheet software. Topics include simple and compound interest, bank discounts, annuities, amortization, and investments. Students study the basic tools of quantitative analysis, emphasizing data presentation, measures of central tendency, and measures of variation and skewness. This course also includes an introduction to basic theory of random variables, probability theory, sampling, and sampling distributions.

Prerequisites:

D121 Spreadsheet Applications

M101 Math Principles

N725 Network and Operating System Essentials 3 Units

This is an introductory course designed to provide an overview of networking concepts and their implementation in Windows 2000. Students will learn about the features of Windows 2000, administrative tools, TCP/IP, network architectures, and physical network devices.

Quarter 1 (3 weeks)

Microsoft Course #2151

Exam #70-210 & 70-215

N735 Windows 2000 Implementation 5 Units

This course provides students with the skills to install, configure, customize, and support Windows 2000 in a stand-alone environment and as part of a network. Topics covered include user and resource management, NTFS, print services, optimizing performance, mobile computing, and disaster protection.

Quarter 1 (5 weeks)

Microsoft Course #2152

Exam #70-210 & 70-215

N745 Network Infrastructure Implementation 3 Units

Installation and configuration of Windows 2000 services are explored in this course. The goal of this course is to enable the student to efficiently configure various client services that are an essential part of a Windows 2000 network. Topics include configuring TCP/IP services, security, remote access, and routing in Windows 2000.

Quarter 1 (3 weeks)

Microsoft Course #2153

Exam #70-216

N746 Network Infrastructure Support 2 Units

Supporting and troubleshooting Windows 2000 networks are introduced in this course. Students will learn to set up Internet access and web servers for a network, remote installation, and administration, connecting Windows 2000 with other operating systems, and troubleshooting Windows 2000 networks.

Quarter 2 (2 weeks)

Microsoft Course #2153

Exam #70-216

N825 Directory Services Implementation 5 Units and Administration

The course introduces Active Directory™ in Windows 2000. Students will learn to install, configure, and administer Active Directory services. Topics include group policy management, directory replication, and delegation of administrative controls.

Quarter 2 (5 weeks)

Microsoft Course #2154

Exam #70-217

N836 Networking Services Design 4 Units

The objective of this course is to prepare the student to design a Windows 2000 network for various organizational needs. The course is organized into four areas. The topics presented in this course are: Designing the Network Foundation, Designing Internet Connectivity, Designing Extranet Connectivity and Creating an Integrated Network Services Infrastructure Design.

Quarter 2 (4 weeks)

Microsoft Course #1562

Exam #70-221

N925 Directory Services Design 3 Units

This course provides the knowledge and skills to analyze the information technology needs of an organization and design an Active Directory™ infrastructure to meet those needs. Students will learn techniques to research business needs for information technology, then plan an appropriate topology, domain structure, and Active Directory design based on those needs.

Quarter 3 (3 weeks)
Microsoft Course #1561
Exam #70-219

N935 Network Security 5 Units

This course is focused on analyzing the business and technical security requirements of an organization and designing a solution for a Windows 2000 network. Topics include resource access, auditing, authentication, and encryption.

Quarter 3 (5 weeks)
Microsoft Course #2150
Exam #70-220

N945 Network Upgrade Strategies 2 Units

This course provides the information necessary to migrate a Windows NT 4.0 network to Windows 2000. Topics covered include migration strategies, planning and deployment of the upgrade, planning hardware restructuring, and troubleshooting the migration.

Quarter 3 (2 weeks)
Microsoft Course #2010
Exam #70-222

P010 Workshop 0 Units

Workshop is an instructor-guided laboratory providing additional practice, application, tutoring, and skill development in subject areas where additional instruction is needed. Workshops support student success in every program by assisting students in meeting course and program requirements in accounting, math, English, computer applications, keyboarding, electronics, or any other topic requiring additional work.

(Please see keyboarding policy outlined in the Policies and Procedures section of the catalog.)

Q700 Network Essentials and Cisco Networking Fundamentals 6 Units

This course is the first course in the Microsoft MCSE series and the Cisco Systems Networking Academy Curriculum. The course provides an introduction to network standards, concepts, topology and terminology including LANs, WANs, the OSI model, cabling, Internet Protocol (IP) addressing, subnet masking and network design, and various protocols. Project learning experiences will include designing networks and installation of network premise cabling.

Quarter 1 – Sequence #1

Q750 Routing Technologies 4 Units

This course is the second of four courses in the Cisco Systems Networking Academy curriculum. This course provides an introduction to routers and routing concepts and terminology, including Ethernet and Token Ring frames, RIP and IGRP routing protocols, distance vector and link state routing, routing loop issues, TCP/IP basics, IP addressing, and IP access lists. Students will get hands-on experience configuring Cisco routers.

Quarter 1 – Sequence #2

Q800 Advanced Routing and Switching 4 Units

This course is the third of four courses in the Cisco Systems Networking Academy curriculum. This course covers the advanced features of routers and routing concepts, including IPX access lists, LAN segmentation using bridges and switches, network congestion issues, cut-through and store-and-forward switches, and the operation of the Spanning Tree protocol. Students will get hands-on experience in these areas using Cisco routers.

Quarter 2 – Sequence #1

Q850 WAN Technologies and Project-Based Learning 6 Units

This course is the fourth of four courses in the Cisco Systems Networking Academy curriculum. This course covers various Wide Area Network services, including LAPB, Frame Relay, ISDN, HDLC, PPP, and DDR. Students will configure Frame Relay LMI, map, and subinterfaces on a Cisco router. The course will emphasize project-based experimental activities and final preparation for the CCNA certification exam. Students will synthesize knowledge from the previous courses to create various types of networks for different situations. Trends and new developments in the field of networking will also be examined.

Quarter 2 – Sequence #2

S101 Keyboarding 3 Units

Instruction and class drills on straight copy and simple formats, including block letter, memo, and simple reports. Emphasis on development of keyboarding control, accuracy, speed and concentration exercises, and keyboarding techniques. Students build speed with a focus on rhythm patterns and manipulative skills.

T101 Hospitality and Tourism Overview 5 Units

Overview of the history, current trends, and general organizational structure of the hospitality industry. Emphasis is placed on understanding the relationship of hotels, tourism, and travel to the local and national economy. Students are introduced to the many career opportunities within the industry and may be required to attend certain class sessions off campus.

Course Descriptions

T102 Travel Procedures 6 Units

Study of the services and operating procedures of travel agencies. Explores both manual and computerized processes applied to airline reservations and ticketing. This course includes tour and vacation packaging, travel counseling, and ticketing. Hands-on training incorporates use of APOLLO or SABRE airline reservations system and introduces travel documents, local area tourism sites, and destination geography.

T103 Hotel Operations 6 Units

Study of hotel front office and facilities operations. Examines all stages of guest pre-arrival, stayover, and departure. Students learn aspects of reservations, reception, telecommunications, housekeeping, and security. This course examines interpersonal dynamics of staff and guests.

T104 Food Service 6 Units

Overview of food service operations from purchasing to presentation. This course includes menu planning, selecting and purchasing food, basic food preparation tools and techniques, and dining room service procedures. Students may participate in event planning by budgeting, designing, and presenting campus functions.

T105 Special Topics in Hospitality and Tourism 3 Units

Procedures for the operation of a travel agency are explored. Class activities are designed to familiarize students with industry reference materials. Topics such as rail travel, cruises, tours, and car rentals are also addressed. The course enables students to practice and strengthen their sales and customer service skills.

T107 Hospitality and Tourism Field Experience 3 Units

Students demonstrate ability to budget, plan, and arrange travel by coordinating a class trip. By experiencing the hospitality industry as a consumer, the student develops perspective on the value of industry quality and service.

Prerequisites:

T101 Hospitality and Tourism Overview

T102 Travel Procedures

T103 Hotel Operations

T104 Food Service

T210 Hospitality and Tourism Internship 4 Units

The internship program is an opportunity for students to gain the experience necessary to compete in today's job market. It is designed to provide students with real-life work experiences in on-the-job training situations relevant to their major fields of study. Internships provide students the opportunities to put theory into practice, applying the knowledge and skills they have learned at Heald to actual work situations. Taken in the final quarter of the degree program.

W101 Word Processing Essentials 3 Units

Application of word processing features and concepts. This class explores the concepts and features of word processing through projects emphasizing formatting, proper business style, and the development of written communication skills.

Prerequisite:

D104 Introduction to Software Applications

W102 Word Processing 6 Units

Application of word processing features and concepts. This class emphasizes efficient use of the features and concepts of word processing. Projects related to the student's career area focus on standard forms, formatting, and the development of written communication skills.

Prerequisite:

D104 Introduction to Software Applications

