Baker College

Associate of Applied Science in Computer Programming, Java Option

STUDENT DATA:
NAME: ROADMAP'S DEGREE **SSN:** 000-00-0000

	Credit Required	Potential Credit

Composition I (ENG101) [EN024A] **4.00**

Emphasizes the development of reading and responding to literary texts. Writing includes essays on multiple issues and a college-level documented research assignment.
Prerequisite(s): ENG 099 or placement exam .
(College credit by examination may apply.)
{DANTES Code = 11.07.00}

Composition II (ENG102) [EN025A] **4.00**

Continues developing students' critical thinking and writing skills through reading and writing persuasive and argumentative papers. Major concentration will be on argument in research.
Prerequisite(s): ENG 101 or acceptable English essay , placement exam .
(College credit by examination may apply.)
{DANTES Code = 11.07.00}

Information Systems Theory (INF 111) **2.00**

Introduces terminology, concepts, and principles related to information processing systems. Hardware, software, data, data storage, and the development of computer information systems are covered along with other related topics.

Word Processing (INF 112) **2.00**

Introduces students to word processing software and applications. This will include demonstrating the ability to perform basic Windows operations commands and word processing commands, which include creating, saving, printing, formatting, editing, and retrieving documents.
Prerequisite(s): WPG 098 or high school typing/proficiency

Electronic Spreadsheets (INF 113) **2.00**

Introduces the student to beginning electronic spreadsheet terminology, concepts, and applications. The student will gain the ability to enter/edit, save/retrieve files, format, and print spreadsheets and reports. Students are also introduced to basic formula development.
Prerequisite(s): WPG 098 or high school typing/proficiency.

File Management (INF114) **2.00**

Introduces beginning database terminology, concepts, and applications using a file management software program. Students will demonstrate an

understanding of data hierarchy; the ability to design simple files, edit file content, print file content and simple reports; and the ability to search and sort files and use pre-existing formulas.
Prerequisite(s): WPG 098 or high school typing/proficiency .

Mathematics for Business (MTH 101) **4.00**

Presents the application of mathematical skills to business functions to provide students with the basics needed to compute problems in the areas of simple interest, ratios, percentages, compound interest, annuities, and present values.
Prerequisite(s): MTH 099A or placement exam .
{DANTES Code = 14.02.01}

Introductory Algebra (MTH111) [MH047A,MH048A] **4.00**

Covers the basic elements of algebra. Included in the course are integers, rational numbers, variable expressions, linear equations, polynomial operations and factoring, algebraic fractions, linear graphing, systems of linear equations, and the quadratic formula.
(College credit by examination may apply.)
{DANTES Code = see 14.XX.XX series}

Intermediate Algebra (MTH112) **4.00**

Reviews linear graphing and rational expressions, quadratic equations, inequalities, exponential and logarithmic functions, radicals, and sigma notations.
Prerequisite(s): MTH 111 .
(College credit by examination may apply.)
{DANTES Code = 14.01.04}

Trigonometry (MTH124) **4.00**

Includes trigonometric functions, their properties, solution of right and oblique triangles, radian measure, graphs, trigonometric equations, and applications.
Prerequisite(s): MTH 112
(College credit by examination may apply.)
{DANTES Code = 14.12.00}

Human Relations (PSY101) **4.00**

Explores the aspects of personality and human interaction with applications to both personal and professional growth. Topics include self-awareness, motivation, goal setting, values, problem-solving, communication skills, and stress management.
{DANTES Code = 03.13.04}

Oral Communication (SPK201) **4.00**

Develops confidence and skill in many facets of oral communication. Students will explore diverse topics and formats, using both organization and research to support themselves during oral presentations. Self-improvement, poise, and group sensitivity are part of the course objectives.
(College credit by examination may apply.)
{DANTES Code = 04.10.00}

Workplace Communication (WRI115) [CM007A] **4.00**

Prepares students to be effective communicators in the workplace. The course includes fundamental techniques and formats used in business and technical communication. Clear, concise, factual communication is stressed through a variety of applications including letters, memoranda, business and technical proposals, manuals, and research writing. Preparation of a resume and associated job-search documents are included.

Professional Career Strategies (WRK291B) **1.00**

Covers all phases of securing employment in a required seminar. Major topics include resume preparation, interview strategy, job application, job search action planning, personal appearance, and coordination of the graduate's employment search activity with the College Career Services Office.

Major Core Requirements

Introduction to Operating Systems Concepts (CIS106A) **4.00**

Provides an introduction to hardware and operating systems concepts. Includes an introduction to systemboard components, memory functions, the boot process, disk fundamentals, command line operations, evolution of the Windows family of operating systems, operating system structure, installation, system files, and management. Students will compare Windows 95/98, Windows NT, and Windows 2000. Materials include a focus on elements contained in CompTia's A+ OS Exam.
Prerequisite(s): WPG 098 , any of the INF courses .

Systems Development Methods (CIS251) **4.00**

Presents traditional methodologies of system analysis, design, and implementation along with recent developments in the field providing a total approach to information systems development. The course focuses on how to develop information systems in an engineered, disciplined manner utilizing real-world situations and applications.
Prerequisite(s): One level of a programming language .

Visual Basic (CIS310) **4.00**

Introduces object-oriented programming design using Visual BASIC for Windows. Students will learn the tools and methods used to analyze real-life problems and develop programs that address those problems. BASIC language has been a long-standing standard for learning programming. Visual BASIC builds on this tradition plus introduces students to the powerful tools of object-oriented programming that have fast become a standard in most Windows programming languages.
Prerequisite(s): One level of a programming language .

Database Management Using SQL (CIS331) **4.00**

Expands on the concepts learned in the introductory course in database creation by introducing the student to higher levels of database development and Computer Science concepts. Students learn SQL in order to study the manipulation of a relational database such as Oracle. The course also includes a survey of database platforms.

Introduction to Programming (CS111) **4.00**

Introduces students to programming concepts such as logic and flow charting as well as some basic programming techniques.
Prerequisite(s): Any INF course . Corequisite(s): MTH 111 .
{DANTES Code = 05.03.01 or 05.03.05}

C++ Programming (CS217A) **4.00**

Introduces program design and development using C++ language. Uses Microsoft Visual C++ to provide students with experience working with the visual development tools. Students will demonstrate the ability to use C++ to design solutions to problems.
Prerequisite(s): MTH 112 , CS 111 .

Introduction to Java (CS 221) **4.00**

Provides first time programmers the opportunity to learn programming using Java.Introduction to Java is part of the Sun Microsystems Academic Partnership Program and is a Java Programmer Certification class. This overview course helps students understand the significance of the Java programming language. Students will develop skills generally in object-oriented programming and specifically in Java technology. Students will be able to read and edit Java source code and create simple programs using Java technology. Sun Academic Initiative Course SL 110.
Corequisite(s): CS 111 .

Programming with Java Technology (CS 222) **4.00**

Provides students with a strong foundation in object-oriented concepts and object oriented analysis and design as they relate to Java technology. This class also provides students with experience using Java programming language constructs. This is a non-programming course. This is a preparatory course in design methodologies using Java technology intended to provide students with the necessary background for taking the next class in the series.
Prerequisite(s): CS 221.

Java Object Oriented Programming (CS 223) **4.00**

Teaches students the syntax of the Java programming language; object-oriented programming with the Java programming language; creating graphical user interfaces (GUI), exceptions, file I/O, threads and networking. Students will use skills acquired in this class and the previous two Java classes to develop a Java application.
Prerequisite(s): CS 222 , CS 217A .

Technical Electives - select 3 courses **12.00**

Technical Electives - select 3 courses from the following:
CIS119 AS/400 Cl And File Design 4
CIS132A RPG IV 4
CI233A Advanced RPG IV 4
CI302A Intermediate Database Management 4
CIS303A Computer Architecture 4
CIS310 Visual BASIC 4
CIS311 Advanced Visual BASIC 4
CIS331 Database Management Using SQL 4

CIS404 Advanced Computer Architecture 4
CIS421A Advanced Database Management 4
CS111 Introduction to Programming 4
CS205 Introduction to Unix 4
CS211 Shell Programming 4
CS217A C++ Programming 4
CS218A Object Oriented Programming With C++ 4
CS221 Introduction to Java 4
CS222 Programming with Java Technology 4
CS223 Java Object Oriented Programming 4
CS361 UNIX System Administration I 4
CS362 UNIX System Administration II 4
CS363 UNIX System Administration III 4
CS422 Database Programming 4
GRC131A Introduction to Graphic Imaging 4
WEB111A HTML Programming 4
WEB121A World Wide Web Design 4
WEB211 Web Scripting 4
WEB221 Interactive Web Design 4
WEB222 Internet Commerce 4
(Visit the Baker College website for a description of these courses.)

Work Experience Project (WRK 218) **4.00**

Focuses on development of work-related skills and ethics, allowing for students to become more familiar with issues in the work environment. Students will complete a major project focusing on their specific career goals.
Prerequisite(s): ENG 102 , minimum GPA 2.00 .

Excess or Duplicate Credit

TOTAL **97.00** **0.00**

Thank you for requesting support from the U.S. Coast Guard Institute (CGI). Whereas we serve as an activity in support of your unit Educational Services Officer (ESO), you are encouraged to seek assistance from your local ESO in your academic endeavors. The following information is provided to help you understand what is presented in this degree plan:

This document is an UNOFFICIAL Degree Plan to provide you with a preliminary assessment of how your prior learning experiences might fit into the specified degree program for this academic institution. If you choose to pursue this degree option, you must present it to a college representative, who will review it for the following:

o Accurate representation of the college's degree program requirements, including course numbers and titles, credit hours for each course, lower- and upper-level course requirements, and the total number of credits needed for the degree.

o Appropriate assignment of ACE Guide-recommended credit at the lower or upper level for military service schools and occupations, CLEP, DSST, and other tests, transfer credit for courses from other colleges and universities, certification programs, etc.

o Appropriate assignment of SOC Course Category Codes from the SOC Handbook Transferability Tables. The SOC Degree Program Handbooks can be obtained from the SOC web site at: www.soc.aascu.org should you wish to learn more about the course transfer guarantees among SOC network institutions.

IMPORTANT NOTE: When you are ready to seek admission into this degree program, please contact the USCG Institute at 1-405-954-7241. Your advisor will send the college or university an official U.S. Coast Guard Institute transcript, a copy of the degree plan, and a ready-for-signature SOC Student Agreement which, when signed by a college official, becomes a contract for degree completion committing the college or university to supporting you in your academic endeavors.

Credit for all courses you have taken must be reflected on official transcripts sent directly to this college from the administrative offices of the colleges you previously attended. This degree plan is often used for information purposes by college counselors pending receipt of the official transcripts from the source colleges.

This degree plan is not intended to compete with your local college or university. Keep in mind, you are allowed to transfer in a significant amount of the degree requirements to this institution. As such, credit from local colleges, college level examination programs, or advanced military training may be applied to this degree. You may also complete the courses necessary from this college either in residence (on campus or possibly on a military base at a campus extension in the Education Center) or through distance delivery of the courses. If you have questions, please contact the college counselor or your advisor listed at the bottom of this Degree Plan.

DEGREE PLAN LEGEND:

SH = Semester hours
VOC = Vocational, not relative to an academic degree
LL = Lower Level, i.e. courses at the Freshman/Sophomore level
UL = Upper Level, i.e. courses at the Junior/Senior level
GL = Graduate Level (sometimes recommended by ACE for very complex courses)
[#] such as [EN024A] or [EN024B] = SOC Course Category Codes*
{#} such as {DANTES Code = 01.02.03} = DANTES Academic Codes **

* SOC Course Category Codes: Service members Opportunity Colleges (SOC) is a consortium of over 1,600 accredited colleges and universities seeking to provide degree opportunities to the military. Over 170 of these institutions participate in network degree programs developed for the Army, Navy, Marine Corps, and Coast Guard. A SOC course category number beside a course from one of these institutions, such as [EN024A] or [EN024B] for English Composition, indicates that courses from other degree program institutions with the same code may be taken to satisfy the degree requirement. See the SOC Degree Programs Handbooks at http://www.soc.aascu.org/

** DANTES Academic Codes: The Defense Activity for Non-Traditional Education Support (DANTES) publishes the DANTES Independent Study Catalog (DISC) annually, which lists more than 6,000 courses from dozens of regionally accredited colleges and universities. Because this is a degree from a SOC affiliated college, the academic residency requirements are limited, thereby allowing students to transfer

in a significant portion of the degree, as mentioned above. If the course you desire to take is not offered by this institution when you want to take it, consider the opportunities the courses in the DISC present. For more information, visit http://www.dantes.doded.mil/dantes_web/distancelearning/disc/front/cont.htm Keep in mind, you should always check with the counselor or academic advisor at this institution before enrolling in a course listed in the DISC to ensure it will be accepted in transfer toward this degree.

Baker College General Information

We have a single focus...helping you get your dream job in the shortest time possible. We call it Career Credentials. It means you'll be 100% ready for your new job with no additional training required. Baker offers training and education in growing career fields like business, health, computers, technology, human services, and education. Because of our focus, we work hard to give you the best possible experience, including state-of-the-art facilities, small classes, professional instructors with real world experience, convenient class times, and accelerated programs. Can Baker College really help you find your dream job? Ask one of our graduates. 99% of them are employed!

Baker's degree programs are designed to prepare you 100% for your new career or advanced position as quickly as possible, with no additional training required. That's exactly what employers are looking for!
Baker offers Master's degrees, Bachelor degrees, Associate degrees and certificates in growing, high-demand career fields.

Within a few years on either side of the turn of the 20th Century, two proprietary institutions of higher education were founded, completely independent of each other, but with remarkably similar missions - to train people with the skills needed for employment in the offices of the great industries that were emerging in their cities at that time.

In 1888 Woodbridge Ferris started what is now Baker College of Muskegon. It was an entrepreneurial venture inspired by the "boom" years of lumbering and Great Lakes shipping on Michigan's western coast. Twenty three years later, in 1911, in a similar enterprise motivated by the growth of the great automotive factories in Flint, Eldon E. Baker founded Baker Business University. Both schools flourished, earning national accreditation, and incorporation under the laws of the State of Michigan. Then in 1965, after years of separate but parallel existence, the two colleges were brought under a single management group. Together they were authorized to grant the associate of business degree in 1974 and the associate of science degree in 1981. Muskegon College was reorganized as a non-profit corporation in 1969 and Baker College made the same transition in 1977. In 1983 Baker College acquired the property of the former John Wesley College (in Owosso), and the next winter began operation of a campus there. Then in 1985 all three campuses received regional accreditation from the North Central Association of Colleges and Schools. Six months later they were authorized to grant the bachelor of business administration degree.

In 1986, following 21 years of close and valuable association, the schools officially merged to form the Baker College. At the same time, Baker College of Owosso became autonomous, with its own officers and board of regents, but still a

part of the Baker College system. Also in the same year, Muskegon began offering extension classes in Cadillac. On January 4, 1990, Baker College acquired the campuses of Pontiac Business Institute in Pontiac, Mount Clemens and Port Huron, Michigan, forming Baker College of Eastern Michigan. In June, 1990, Muskegon College changed its name to Baker College of Muskegon. Jackson Business Institute was added to the mix in 1994, becoming Baker College of Jackson, making the Baker System one of Michigan's and the nation's largest independent career colleges.

Amazingly, through all of this growth and success, the singular component that brought two fine business schools together to form one outstanding allied health, business, and technical career college has not changed. On all eleven Baker College campuses, which includes Baker College Business and Corporate Services, Baker College Online, and the Baker College Center for Graduate Studies as well as five branch locations, the basic mission is the same as it was in 1888 and 1911. The colleges still espouse and teach the principles of free enterprise and a strong work ethic, and prepare their students for employment and citizenship in today's competitive working world.

Baker College has experienced significant growth in recent years in both facilities and numbers of students. A highly significant step in the Baker College pursuit of academic excellence was taken in the fall of 1994 with the introduction of the College's first graduate studies program, an executive master of business administration degree with an emphasis in leadership. Administered by the Center for Graduate Studies, this was the first of a series of advanced degrees which extend masters degree opportunities to students in all of the career disciplines available through Baker College. In the fall of 1995 the College added the first engineering bachelor degree programs to its curricula.

Rapid growth in virtually all of Baker's campuses, and in the Business and Corporate Services and Online divisions, has brought Baker College's Fall 2002 enrollment to nearly 23,000 students, making it one of the largest private college systems in the State of Michigan. This growth can be expected to continue through future years, stimulated and supported by an ever-increasing demand for skilled and educated employees in all job fields, by advances in distance learning technology, and by the open-minded approach espoused by the Baker College administration toward innovation, entrepreneurship, and just plain hard work.

Have you been intimidated by the tuition that other online colleges charge? You may have thought that online education is not an option you can afford. But with Baker College Online, your tuition is less than half that of other major online colleges, in most cases! This makes Baker one of the most affordable options for higher education available to busy working adult students.

Tuition rates : (Subject to change)
Undergraduate
One-time application fee: $20
Cost per credit hour: $165
Graduation fee: $50
Requirements for Success

§ Textbooks for all online courses must be purchased through the Online Bookstore.

§ Most online courses are 6 weeks long and require a lot of reading.

§ Class discussion takes place throughout the week, including weekends. Instructors consider student participation very important and will grade accordingly.
§ You must participate in class discussion at least five out of seven days each week.
§ A term paper and/or final exam is due at the end of each course.
§ Assignments and structure varies from course to course.
§ Always check the course outline at the beginning of each course for assignment information and due dates.

For your next step in pursuing this degree, please contact:

Tami Sarles
Baker College Online
1116 West Bristol Rd
Flint, MI 48507-9843
Toll Free: (800) 469-3165, (810) 766-4390
E-mail : military@baker.edu
Website: http://www.baker.edu/

POLICY NOTES:

Graduation Requirments
. Successfully complete all the courses required by the program of study.
· Complete a minimum of 24 quarter hours of credit, through actual class time with Baker College. Courses below the 100 level will not be used.
· Complete at least 12 quarter hours in the major at Baker College.
· Achieve a cumulative grade point average of 2.00 or better.
. Complete the online graduation form one quarter prior to graduation.

Associate Degree: A student may apply nontraditional credit including advanced placement, waiver tests, articulation, CLEP tests, transfer credit, and experiential learning credit for up to one and one-half years of credit toward an associate degree. Six courses (24 credit hours) must be completed in traditional Baker College programs. A minimum of three courses (12 credit hours) must be completed in traditional Baker College courses in the major field of study. Please contact Dawn Prueter, Registrar for more information (dawn@baker.edu).

This college is rated as one of the nation's best in U.S. News & World Report's "America's Best Colleges" issue.

Evaluation completed by: Charles Morrison On: 31 May 2007